

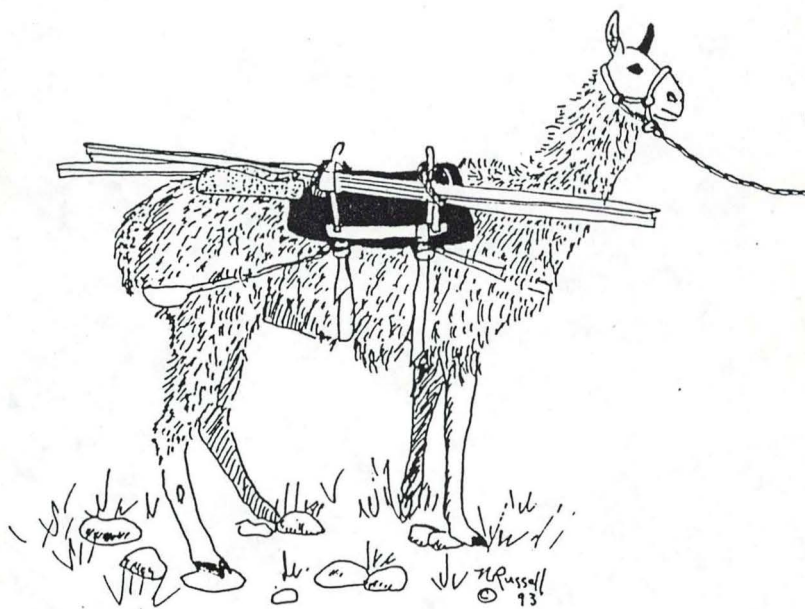
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Developing a Strategy in the Forest Service for the Use of LLamas as Alternative Pack Stock

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ABSTRACT

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TITLE: Developing a Strategy in the Forest Service for
the Use of LLamas as Alternative Pack Stock

ABSTRACT: In administering fragile Wilderness and backcountry recreation areas, the Forest Service should be using the lowest impact techniques possible. Llamas are a relatively low impact alternative to traditional pack stock and to motorized vehicles. There exists within the ranks of Forest Service employees a small corps of llama "user-advocates", with the number increasing more slowly than the increasing use of llamas for recreational purposes by the public. This paper explores the questions of whether the Forest Service should encourage the increasing use of llamas by the agency, and if so, what should be the role of internal training in building the skills of existing "user-advocates" and in increasing their numbers. It explores partnership opportunities with the major association of llama users, and provides a detailed training outline for a 2 1/2 day "hands-on" training course that can be used both within and outside the Forest Service. It concludes with recommended actions that can lead to the increasingly effective use by the Forest Service of llamas as pack stock.

KEYWORDS: Llamas, Wilderness, backcountry recreation, pack stock, packing, training, minimum impact techniques

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EXECUTIVE SUMMARY

TITLE: Developing a Strategy in the Forest Service for the Use of Llamas as Alternative Pack Stock

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SUMMARY: Wilderness, and backcountry recreation areas, are often fragile resources. In administering these areas, the Forest Service should be using the lowest impact techniques necessary to get the job done. That rule applies equally to packing loads. For that reason (and others), many Forests are using llamas to haul administrative loads into these areas. Llamas have a lower impact on trails, meadows, and other resources per unit of cargo carried than either traditional pack animals such as horses and mules or than motorized trail vehicles. For the most part, the use of llamas originates with the lower-grade, younger employees in response to a personal determination that either their loads are too heavy for backpacking or not heavy enough to require the use of a packhorse. Generally, these employees are given little formal training, or left on their own to find training, in the use and care of llamas. Often, the level of time and dollars that are allocated to them for the training is nonexistent or inadequate.

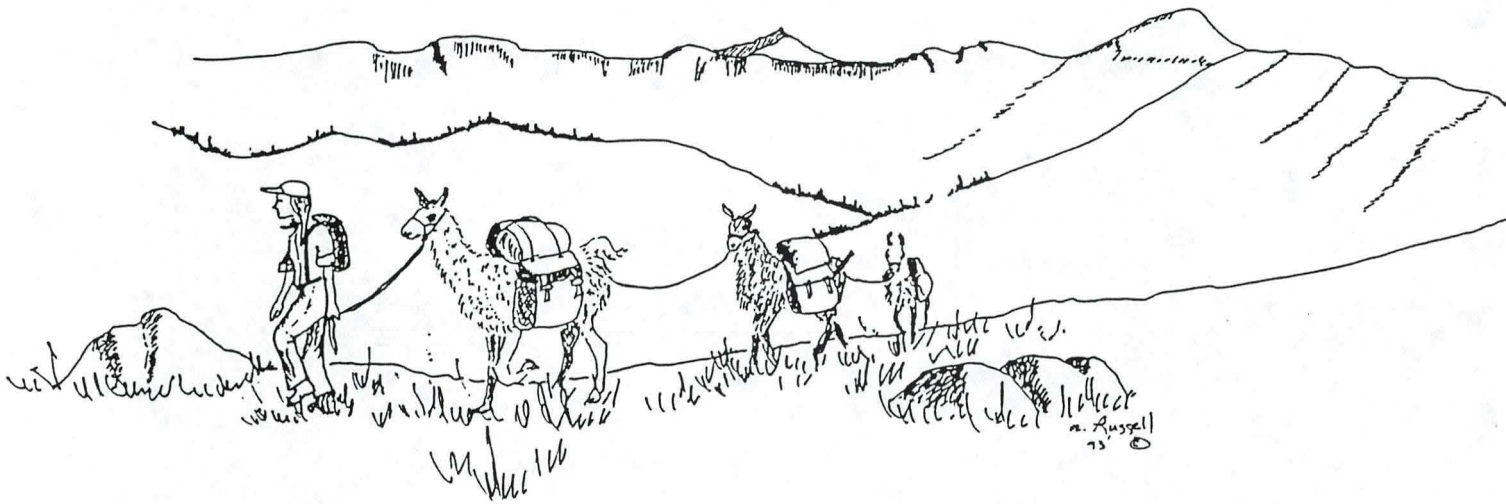
The initial assumption made at the start of the project was that increasing use of llamas by the Forest Service is desirable and that there is a need for a readily available, low cost training opportunity for existing and potential llama users. A partnership was initiated with the dominant breed association, the International Llama Association, to help provide that opportunity. Also, questionnaires were sent to about 80 Forest Service units that were deemed to be most likely to be needing or desiring some formal training. The results of the questionnaire indicated a lower level of training need than

expected. It was found that there are a small corps of llama user/advocates within the Forest Service who are, to a large degree, finding the training they need locally or "getting by" without it. It was also found that llama use by the Forest Service is not growing nearly as fast as the use of llamas by the public, due in part to tradition and a lack of understanding as to the low impact advantages of llamas use in certain situations. It is also concluded that llama use in the Forest Service will grow slowly until they begin to be viewed as environmental education and public relations tools in addition to alternative pack animals. The decentralized , cooperative training program initially envisioned for 1993 is recommended to be postponed until 1994 to allow more time for its development and for internal publicity.

Also included as a result of the research for this paper is a training outline, and list of materials that can be used to develop training courses in the future and to include training in the use of llamas as pack stock in other sessions such as those for wilderness rangers, trail crews, or for horsemanship courses. This outline and materials will be aggregated into a "prototype" training package. Finally, this paper lists a number of experienced llama packer that indicated an interest in being involved in providing training to the Forest Service when it is developed.

In addition to a list of actions required to complete this project, this paper makes Action recommendations to the leadership of the Forest Service, to the Arthur Carhart National Wilderness Training Center and the Ninemile Regional Training Center, and to the Board of Directors of the International LLama Association.

INTRODUCTION and STATEMENT o f PURPOSE



INTRODUCTION

The Forest Service is currently entering into an intensive effort to become more effective in the management of Wilderness and other backcountry areas through education of its personnel and the public about ways to decrease the impacts of recreation use in those areas. Llamas are a lower impact alternative in many cases to the use of horses and mules as pack stock. However, the Forest Service has little experience with using llamas, and there are a number of barriers to obtaining that experience. Some of these include lack of money and lack of understanding about how to obtain the information and equipment needed for an effective start at using llamas. Some managers have a bias against the use of llamas, sometimes originating from a lack of good information, and may not support their use by people on the unit. Some consider llamas as "exotic", and thus feel they do not belong in Wilderness. Still others blame them for being the cause of unpleasant encounters between horses/mules and llama on the trail.

A recent questionnaire, developed by the International Llama Association, polled all Forest Service units in the United States to determine the level of use that llamas are receiving on the unit, and what the unit's policies are as to their use (APPENDIX B). Thirty-seven percent (274) responded. Nationwide, 56% of the Forest Service employees completing the questionnaire are aware of private public recreational use of llamas on their unit, and 26% know of commercial llama use on the unit. At the same time, only about 10% have, or are using llamas themselves to accomplish work on the unit. The growth of llama use by the public appears to be at a higher rate than by the Forest Service, for some as yet unexplained reason.

The Ninemile Wilderness Training Center in Montana has for the past few years been a Regional training center for the Forest Service in the Montana-Northern Idaho Region. As such, it has offered many courses in Wilderness management principles and techniques, including such things as horsemanship, use of primitive tools, low impact camping techniques, etc. It has just recently (October, 1992) become the headquarters of the Arthur Carhart National Training Center for Wilderness, and given the task of developing training courses that can be used nationwide. A recent conversation with the Director confirmed that there is an interest in

developing a llama training program, but that it is not a high priority for funding by the Forest Service.

For the last 3 years, a three day llama packing clinic has been offered and scheduled at Ninemile Training Center to train new Forest Service llama users in the fundamentals and techniques of llama packing. Commercial llama packer Dave Harmon (assisted by the author of this paper) developed a training outline and was scheduled to present the course at the Ninemile center. Because of the funding situation at Ninemile, all such courses must be self-supporting, so a minimum of ten trainees were needed to offer the course. Each year, fewer than ten trainees signed up and the course was cancelled. According to Bob Hoverson, the training center director, there was some interest, but the timing, length, and cost(including travel to Ninemile) were prohibitive. As expected, the interested people were mostly lower graded employees interested in starting to use llamas, but unable to get the support from supervisors and managers to spend the money and time to attend.

The experience described above indicates that a better approach might be to develop a training outline and course materials that could be used by any qualified llama packer (with good instructional skills) to present the training needed by these employees closer to home, at a reduced cost in time and money. The results of the ILA survey also lead to the conclusion that perhaps two courses are needed-one to familiarize the agency personnel with llamas and the advantages of their use (since the majority are likely to encounter them in the woods), and another to actually train the field people on the techniques needed to train and use llamas themselves. These courses can be sponsored and administered through the Ninemile Training Center for Forest Service, and potentially other agencies and groups.

STATEMENT OF PURPOSE

Goals

The primary goals of this project are to document the need and potential for increasing the level of llama use by the Forest Service, to determine the training needs of field personnel in the western United States in the use and care of llamas in the backcountry, and to develop a training outline and materials that responds to that need. A secondary goal is for the development of a partnership between the Forest Service and the International Llama Association (the primary llama owners group in the US) to conduct the needed training for Forest Service employees for a three year period, coordinated by the Ninemile Training Center.

Objectives

1. Obtain the results of a recent questionnaire sent to all Forest Service units in the United States by the packing committee of the International Llama Association and summarize the information obtained from the returned questionnaires. (APPENDIX B)

2. Explore, through the search of available literature, the question of whether the increasing use of llamas by the Forest Service should be encouraged by the agency.

3. Prepare a conceptual partnership proposal for presentation to the Board of Directors of the International Llama Association to obtain financial support for the development of course materials and conduct of the training courses over the next 3 year period. (APPENDIX C)

4. Conduct follow-up surveys of a sampling of Forest Service managers that completed the questionnaire and reported current or reasonably foreseeable use of llamas, to determine their specific training needs through the design and use of a follow-up questionnaire. Determine the likelihood of their unit's participation in the proposed training program(s) once developed. Determine the names, or positions, of target employees on their unit. (APPENDICES G, H, I)

5. Based upon the responses to the questionnaires above, a review of available literature, and consultation with experienced packer/trainers in the ILA, design a training outline and determine needed supporting course materials (APPENDIX A).

6. Develop, through the use of a letter of inquiry, a list of names of experienced llamas packer willing to provide training to Forest Service employees.(APPENDIX E)

7. Coordinate the development of the implementing agreement and the course materials between ILA and the Ninemile Training Center.

LITERATURE

REVIEW



LITERATURE REVIEW

The stated goal and objectives of this project have built into them five major assumptions. The first is that the use of llamas by the public and the Forest Service in the National Forests of the United States is increasing, and the second is that such a trend is a desirable situation. Thirdly, it is assumed that there are good reasons why the use of llamas by the Forest Service for administrative purposes should be encouraged and supported by the agency. The fourth assumption is that the Forest Service needs to demonstrate its support by developing training programs designed to assist with and encourage the use of llamas by its employees. And finally, it is assumed that the development of a partnership between the Forest Service and the dominant llama owner's association would be useful in providing a quality and inexpensive training program. This section examines those assumptions using a review of the available literature.

1. What is the level and trend of llama use by the public and the Forest Service on the National Forests of the United States?

In 1987, Cheryl Anne Arndt conducted a survey, with extensive use of questionnaires sent to public land management agencies, including most Forest Service units in the western United States, as part of her research for her thesis at Colorado State University. She found at that time that "llamas are gaining popularity as an alternative to traditional types of pack stock". Her questionnaire analysis revealed that 37 of 81 units responding (46%) reported public use of llamas for recreational purposes on their unit. In 1992, a similar survey by the International LLama Association (summary included as Appendix B) found public recreation use reported on 154 of 274 units (56%), a significant increase considering the fact that the latter survey involved all units in the United States, including those in the central and eastern portions of the United States where llama use is much lower than in the west. In addition, Ms. Arndt found llama use for administrative purposes on 4 of 70 Forest Service units reporting (5.7%), while the ILA survey found such use on 22 of 274 units (8%). From a comparison of this data, it can be concluded that both public and agency use of

llamas are growing, but the latter appears to be growing at a slower rate.

A second Masters thesis (1989), that of David A. Harmon at the University of Montana, concluded that "llamas are rapidly gaining popularity among commercial outfitters, U.S. agency personnel (Park Service, Forest Service, and Bureau of Land Management), and the general public". Though a subjective finding, his conclusion appears to be borne out by the ILA survey results. Mr. Harmon documents what he calls the "exploding" nature of the llama population in the U.S.- from an estimated 22,000 in 1989 to an estimated 150,000 by the year 2000, adding that "this explosion is fueled by the ever-spreading knowledge that llamas are good investments, gentle pets, bountiful wool producers, and excellent pack animals". If this level of growth in populations does occur, it is a reasonable assumption that llama use on public lands will grow exponentially as well, at least by the public for recreational purposes.

2. Is the increasing use of llamas on public lands a desirable situation?

Llamas, at the most utilitarian level, can be considered a tool to move material from one place to another in the backcountry. For the person who normally backpacks, they can increase the range and decrease of pain of moving larger loads. For the person who normally uses a pack horse/mule or motorized trail vehicle, they can provide a lower impact alternative in the case where the loads are lighter and distances less than normal (assuming that person is able and willing to walk him/herself while leading the llama), or in the case where the resources are particularly fragile.

Wilderness is a special category of backcountry area, and frequently generates the most heated discussions regarding what behaviors and tools are "appropriate". Throughout this paper, use of llamas in designated Wilderness is discussed with the assumption that the conclusions will also apply in other backcountry areas. Wilderness, almost by definition, is also one of the most fragile of resources. In Wilderness, recreation use is not the primary objective, though an important human use. The booklet entitled Wilderness Management Philosophy in the Rocky Mountain Region (1989) says:

In most issues between the biophysical wilderness resource and human desires, the resource and its preservation will be given priority because all wilderness values depend on naturalness of wildernesses. Human influences should be managed so that the natural conditions of wilderness ecosystems are not altered beyond agreed-upon standards. The manager should use only the minimum tool, force and regulation necessary to meet the naturalness objective. /6

Llamas, in some cases, can well be considered the minimum tool for some recreational and administrative tasks. Yet, just a few weeks ago, the Tonto National Forest had proposed closing a Wilderness area within their jurisdiction to the use of llamas as pack animals, while allowing what Forest Service officials there perceived to be "traditional" pack animals such as horses and mules. The reason given was that they (llamas) were new, that is that they had not been used there prior to the passage of the law making the area Wilderness, and that their presence would have a negative impact on the user's experience. The R-2 Wilderness Management Philosophy, cited above, addresses a related issue:

Modern equipment (propane/gasoline stoves, nylon tents, water purifiers) used by today's visitor is not considered contradictory to the wilderness experience by most people. It does not detract from the Wilderness experience and does provide the opportunity to reduce impact on the Wilderness environment. /6

Why, then, would not a llama not be included as one category of "new equipment" and welcomed by the Forest Service as a tool to help disperse use (by extending the range of backpackers) and as an alternative recreational or administrative tool to horses and mules when the larger animal's use is not required? One possible reason, a statement that has often been erroneously attributed to the Wilderness Act or "Congressional intent", is that horses and mules belong in the Wilderness as a part of our "western heritage", and llamas do not. The R2 Wilderness Philosophy appears to dispute that argument:

Methods "... necessary to meet minimum requirements for the administration" (Section 4c of the Wilderness Act) should be determined on the basis of what the minimum tool is. The minimum tool is perceived to be a level that will be the least impacting on the naturalness of wilderness. It is not intended to perpetuate a "vignette of early Western Americana." 6

Another possible argument for excluding llamas from designated Wilderness might be considered a "purist" view-that is that all wilderness should be free from the influence of humankind. Under that argument, nothing belongs in wilderness that wouldn't naturally have been there unless through natural processes. The argument would go on to say that since llamas are not native to North America, their presence in North American wilderness is not desirable. Ed Bloedel, in his paper entitled " Managing Wilderness as a Resource" points out that:

"Legal Wilderness is not the same as "pure" or "absolute" wilderness. In "absolute wilderness", no human influence modifies the area from its purest natural condition. The Wilderness Act defines wilderness at some point well below absolute wilderness-it was a compromise, as well as a stated purpose to encourage recreational use of wilderness". 2

The use of llamas in designated Wilderness, then, is part of that compromise as it encourages the use of Wilderness for recreational purposes by a certain segment of the population that wants or needs a pack animal, but does not need or want to ride the animal or carry very heavy loads over large distances. As with any type of human caused impact, llama use ceases to be desirable or advantageous if it is too heavy or concentrated, or if it is done in a manner that is insensitive to the other resource values.

3. Should the use of llamas for administrative purposes in the Forest Service be encouraged and supported by the agency?

There are a number of very practical reasons why llamas use should be considered, encouraged and supported by the Forest Service, given a certain set of circumstances. Forest Service Region 6, in a document entitled "Llama Use Policy Background Data", summarizes very well some of the potential advantages of llamas over other types of pack stock:

" Llamas are careful, sure-footed animals that can carry a high ratio of weight to their body weight; they are easy to manage for most people, learn quickly, and are generally willing trail partners. They are calm, quiet and patient. Water intake varies with the condition of the llama, but it is possible to pack enough water for travel through dry country. They can utilize low quality forage, and derive a certain amount of water from the vegetation. Supplemental pelletized feed and grain can easily be carried on a backcountry trip. Although they do not generally carry adults, they can pack smaller children, when trained, and have been known to carry an injured adult in an emergency. They are easy to transport, often being moved in mini-vans, pickups, and the usual horsetrailer." /8

In addition, llamas have potentially fewer impacts on fragile soil, water, and vegetation resources than larger and heavier animals such as horses and mules. In addition to size and weight, other factors that contribute to this advantage include the nature of their foot, their gait, their resting behavior, their metabolic characteristics, and even their eating habits. While there is not yet rigorous research data to prove it, there is significant empirical data that indicates that the impacts to fragile soil and vegetation resources per unit of load carried is markedly less than horses and mules. In particular, trail damage is minimal even in the worst conditions of weather and soil moisture:

" When walking, llamas use an evenly spaced, four-beat gait where each foot strikes the ground separately. Three feet are always on the ground. It is a stable gait providing an excellent base of support. This stability contributes to the low impact llamas have on the trail." ("The Gaits of Llamas and Alpacas", by Murray Fowler, DVM, LLAMAS, THE INTERNATIONAL CAMELID JOURNAL, JUNE, 1991 and "The Impacts of Llamas as Hiking Companions", International LLama Association by Tonia Wolf). /8

The question of whether the use of llamas should be encouraged within the Forest Service unfortunately often gets complicated by tradition, custom, image, and misconception. Some feel that the use of llamas threatens the proud history of the Forest Service's use of horses and mules as its primary pack stock. Other maintain that llamas and horses are somehow "incompatible". The following, from the R6 document cited above, puts the use of all kinds of pack stock in perspective, particularly as it relates to wilderness management:

" The Forest Service values the contribution that horses and mules have provided to the development of the National Forests. This will always be a significant part of Forest Service history. In a letter written to Dan Applebaker, High Desert Trail Riders, Mr. Dick Buscher, then Deputy Director of the Pacific Northwest Region's Recreation Unit, wrote "I also support the continued uses of stock in our administration of wilderness because it contributes to the continuation of 'primitive skills' in an otherwise mechanized world." Where horses and mules continue to play an important and valuable part of management and use of National Forest lands, they will continue to be recognized for the niche they fill in meeting certain needs. This will not be to the exclusion of uses of animals that may also fill needs that have evolved over time." /8

The Forest Service is often accused by its critics, and even its supporters, of being slow to change. The slowness of the growth of support for the concept of using the minimum tool in wilderness management is a good example. Ed Bloedel, who in his paper describes sixteen guiding principals for managing wilderness, states the objective as follows:

Managers should scrutinize each and every planned management activity to see first if it is necessary, then plan to do it with the minimum tool required./2

When applied to the use of pack stock, that objective, if followed, would cause the Forest Service wilderness manager to determine, for each job, first whether it is necessary to use a pack animal at all, and if one must be used, which type of animal could get the job done with the least impact. There are many jobs for which horses and/or mules are essential. Yet, how often are horses and mules used for jobs that could be done better (i.e.-with less impact) some other way-simply because that is the way we are "used" to doing it, or it can be done quicker and easier that way, or some other reason without regard to the impacts to the resource? The pursuit of this objective argues strongly for the Forest Service to diversify its knowledge, skill and experience base to develop the capability and willingness to utilize a variety of pack stock, including llamas, when the loads are too heavy or awkward for a person with a backpack to carry them.

Appendix J contains a letter from a horseman in opposition to the use of llamas by the Forest Service, and hypothetical letter of response that summarizes the case for increased use of llamas by the Forest Service.

4. Should the Forest Service develop training programs designed to assist with, and encourage the use of llamas by its employees in doing their jobs? If so, should it involve the development of partnerships with user groups?

The Forest Service has historically been active in developing training programs to transfer new and newly discovered technology and information to its employees when that information is needed to accomplish the agency mission. Once again looking at the question from the relatively narrow view of Wilderness management, it is

clear that the Forest Service is increasingly placing a high priority on training its employees on Wilderness use and management techniques and philosophy so that we can help educate the public by example. The impetus for improving the wilderness education program is in the 1990 RPA (Resources Planning Act) document:

"Education is the most important tool for increasing public awareness about wilderness policy because it affects attitudes, changes of behavior, and helps develop outdoor ethics. If wilderness education succeeds, wilderness managers will be able to rely less and less on regulations and laws to manage Wilderness."/7

Yet, before we can help educate the public, we need to tackle ourselves first where attitudes and behavior need changing, or a sharper Wilderness ethic needs to be developed. One such area, as described in the previous section, is in decisions regarding our use of pack stock. In her article entitled "LLama Use by the Forest Service" in the July/August issue of LLAMAS Magazine, Judith Strom quotes Forest Service employee Laura Towner:

"The llamas (we use) are not only an excellent example of how we can modify our use of wildlands to reduce our impacts, but they often provide us with the openings that we need to teach low-impact camping to people that we meet in the backcountry. When people stop to ask questions about the llamas, we can usually bring the conversation around to talk about ways that people can help protect the Wilderness." /4

Undoubtedly, the urgent need to train and educate Forest Service Wilderness managers led to the recent establishment of the Arthur Carhart National Wilderness Training Center, formed from the existing organization of the Region 1 Wilderness Training Center at Ninemile Ranger Station near Missoula. In a recent phone conversation with its Director, Connie Meyers, I was told that the Center's highest priority job is the development and cataloging of detailed training materials, including course outlines, for use Nationwide by any qualified instructor-rather than the development and execution of individual training courses that could be attended by only a

handful of people. I was also told that the development of partnerships that could be attended by only a handful of people. I was also told that the development of partnerships with user groups was a key aspect of the Center's strategy.

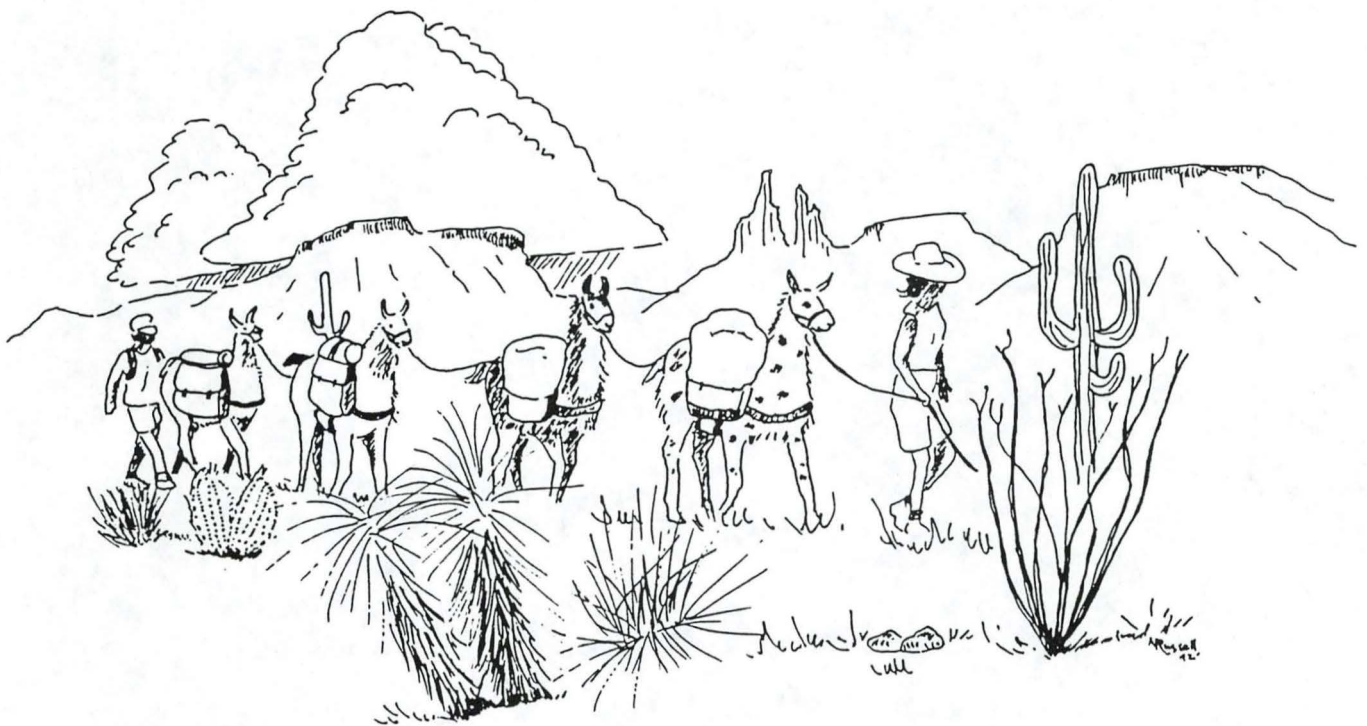
A previous Clemson student project and paper by Larry Timchak (1989) entitled "An Analysis of Wilderness Training and A Strategic Plan to Help Meet Wilderness Training Needs", documented the need and advocated the establishment of the National Wilderness Training Center at Ninemile. Mr. Timchak also addressed the unsuccessful attempts at Ninemile to gain enough students to hold a session on the use of llamas, and offered a possible solution:

The "Understanding Llamas " course at Ninemile has drawn little interest, yet llamas are an issue in some areas. The topic may be important, but perhaps there is another way to package it. There is a need to determine whether the course meets employee needs." /5

Much of the work I have undertaken in my project is designed to help make that determination. Mr. Timchak suggested the one possible solution would be the use of the "geographic dispersal model" of instruction, where instructors move from location to location to serve students. The advantages of that approach include less travel and per-diem expenses overall, the student's ability to get "hands-on" experience, and the exposure of more students to high quality instructors. The possible disadvantages include maintaining a pool of qualified instructors willing to travel, and the coordination of logistics at the training location. He, too, strongly supported the development of partnerships with user groups as a way to speed up and improve the quality of the training efforts.

The remainder of this paper is the documentation of my efforts at determining the training needs of Forest Service employees in the use of llamas as pack stock, in designing a training outline that would be suitable for distribution through the National Wilderness Training Center, in developing a partnership with a major user group, and in testing Mr. Timchak's notion that a redesigned training session, using the "geographic dispersal model" would be more successful than the earlier course offering at the Ninemile Training Center.

METHODOLOGY



METHODOLOGY

1. Initial Questionnaire

Prior to attending the Clemson Recreation Shortcourse in September, 1992, I had been involved in recreational packing of llamas for about ten years. I had seen the use of llamas by the public grow significantly during that time, and become aware of scattered pockets of llama use by the Forest Service. For the past three years, I had assisted the Ninemile Wilderness Training Center near Huson, Montana in offering a introductory llama training session for new llama users-but there had not been sufficient interest to allow it to be held. That situation did not agree with my perception that significant increases in the use of llamas by the Forest Service was inevitable and eminent. I had committed myself to the Training Center Director to assist in developing a new approach to the training.

One of the recurring themes of the Clemson Shortcourse is that recreational activity, and the management techniques needed to keep up with it, are in a constant state of flux and difficult to pin down to any point of time. One effective technique, however, is a well designed and executed survey of the user. I determined while at Clemson to use some of the techniques and principles I learned to try to design that new training approach so it was responsive to the user, in this case the field level Forest Service employee.

Fortunately, the International Llama Association (the largest association of llama users in the United States) had set out earlier in 1992 to determine the current level of public and agency llama use on National Forests throughout the United States, and to determine the kind and amount of llama use restrictions on the National Forests. Questionnaires had been designed and mailed to all National units in the country (a total of 740), of which 274 (or 37%) were returned. At the time of my attendance at Clemson, the questionnaires had not been analyzed and a summary of results prepared. My objective was to use the survey results to determine the level and geographic concentration of llama use on National Forest land by the public and by the Forest Service. That would, I hoped, assist me in determining in what geographic areas employees would be most likely to be interested in training regarding llamas and their use as pack stock. My first task was to

obtain the raw questionnaire data from the Association and prepare the analysis and summary. Appendix B contains the results in a tabular and graphic format, and a narrative analysis of results that I prepared for the Association.

2. Partnership Proposal

I concluded from the results of the initial questionnaire that the use of llamas by the public on the National Forest was growing faster than their use by the Forest Service. I formed an initial hypothesis that there was indeed a need for training "would-be" llama users in the Forest Service and that it would be advantageous to enlist the support of the International Llama Association (ILA). In October and early November, I prepared a proposal that was presented to the Board of Directors of the ILA in late November. Appendix C contains a copy of that proposal.

The proposal emphasized the mutual benefit to the ILA and the Forest Service of cooperating in the development of a training program for Forest Service employees, to be coordinated by the Ninemile Wilderness Training Center in Region 1. I contacted the training director at Ninemile, Bob Hoverson, to ensure that the Center was still interested in coordinating the program. The premise of the proposal was that there needed to be a training program that was well-defined and mobile and could be presented, by a contract instructor(s), at various locations close to field locations where llamas were contemplated for use by Forest Service units. At its meeting in November, 1992 the Board of Directors of the International Llama Association voted to fund the project in the amount of up to \$3500 to develop and conduct the courses in 1993.

3. Follow-up Questionnaires

Questionnaire #1

One of the actions proposed was the conduct of interviews with Forest Service employees known to use, or to be contemplating the use of, llamas on their unit. In the end, this was accomplished by the development of a questionnaire rather than the phone interviews initially proposed. I developed that questionnaire

(Questionnaire #1, in Appendix H) with the following objectives in mind:

- to determine the level of satisfaction with the use of llamas on the unit in the past, if any.

- to determine what the primary factor(s) are preventing the use of llamas on the unit, if they have not yet been used.

- to determine by whom the llamas are used, and for what purposes.

- to determine the level of training of the individual llama users on the unit.

- to find out whether the unit had been aware of the course offered at the Ninemile Training Center for the last 3 years, why they did not attend, and if they intended to attend in 1993.

- to determine how the course might be changed to make it more likely that they would attend.

- to determine whether they were aware of opportunities to incorporate training in llama use with other planned training sessions.

- to determine whether a a short "awareness level" training program would be useful in obtaining the support needed to continue to use llamas on the unit.

Questionnaire #1 was mailed in early January 1993 to 33 different addresses that responded to the original ILA survey that they had used, or were contemplating use, of llamas. (see Appendix G for address list). Responses were requested by February 15, 1993. By that date, responses were received from 25 of those units, for a 76% return rate.

Questionnaire #2

Another questionnaire (#2) was developed to sample units that had responded to the initial ILA questionnaire and had indicated no past or contemplated llama use. (Questionnaire #2 is in Appendix I). Those units were selected that reported both llama use by the general public and commercial llama use on the unit. The general objectives of this questionnaire was to determine why llamas were not being used, and whether the availability of training would make a difference. In early January, Questionnaire #2 was sent to 49 units (see Appendix G for address list.). Responses were requested by February 15, 1993. By that date, responses were received from 35 of those units, for a 71% rate of return.

4. Instructor Availability Inquiry

Anticipating the need for qualified instructors if the training program were implemented in 1993, I sent letters of inquiry in December, 1992 to 28 individuals or partnerships that I knew to be qualified by experience to teach Forest Service employees the basics of llama packing. All are either commercial llama packers or recreational packers with several years of experience. (see Appendix E for inquiry letter and mailing list). By March 1, 1992, sixteen of them had responded (for a positive response rate of 57%).

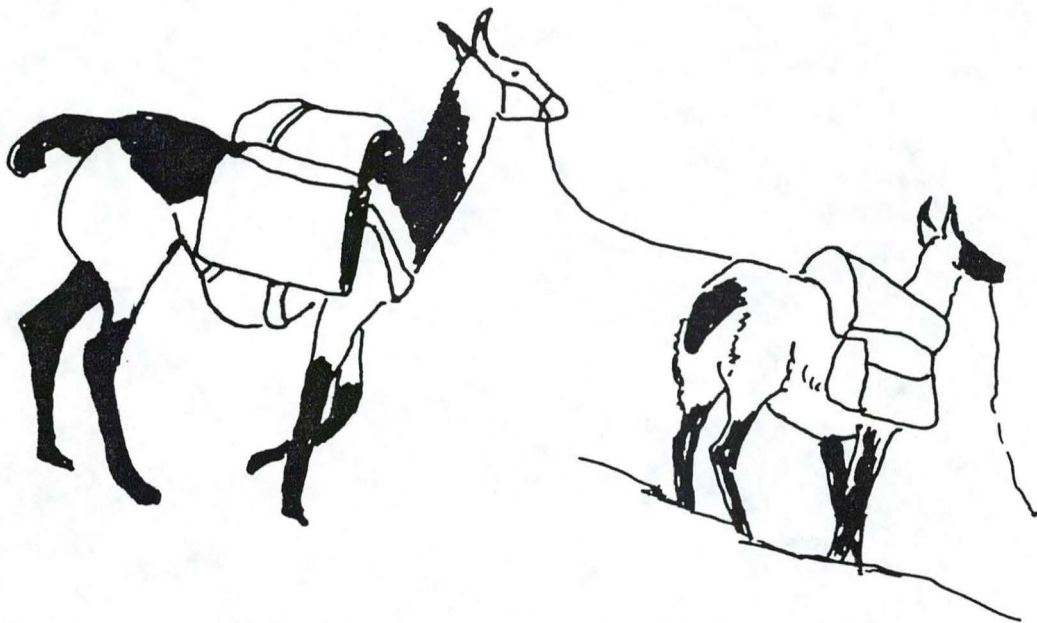
5. Training Outline

The principle outcome of this project has been to develop a training outline that could be used by any qualified instructor to teach Forest Service employees, or any other group of interested but inexperienced people, how to use llamas as pack animals and care for them, both in the pasture and in the field. Because of the low impact nature of the animal, another of the emphases of the training was to be on minimum impact camping, trail use and stock handling techniques.

For this task, I consulted a variety of printed material and videotapes, as outlined in Part II of the Reference list and used my

experience as a llama packer to develop a list of topics that needed to be covered. From that, I developed the training outline shown in Appendix A. I then sent the draft outline to five experience llama packers for review and comment. The outline was revised using their comments and suggestions.

ANALYSIS
and
CONCLUSIONS



ANALYSIS and CONCLUSIONS

A. Forest Service Use of Llamas

Following is a summary of conclusions from the literature review:

1. Llama use by the public on the National Forests has increased significantly in the last 5-10 years and will continue to do so.
2. To the extent that llamas are used as low impact alternative to other pack stock or motorized vehicles in fragile county, the increasing use of llamas on the National Forest is a positive trend.
3. There is no statutory or resource reason why llamas should not be allowed, and in some cases, encouraged, in Wilderness.
- 4.. Llamas can, in certain situations, be considered the "minimum tool" for carrying loads into Wilderness.
5. In addition to item 4. above, there are a number of practical reasons why llama use by the Forest Service should be encouraged and supported in situations where they are capable of doing the job required.
6. The Forest Service should increase its efforts to provide quality training opportunities for its employees interested in using llamas as pack stock.

As stated earlier, the initial International Llama Association questionnaire indicated that Forest Service use of llamas was lagging behind llama use by the public. One of the objectives of the two follow-up questionnaires was to determine some of the reasons for that situation.

Questionnaire #1 Summary (regarding past and future use of llamas)

This questionnaire was sent to those Forest Service employees most likely to be familiar with the advantages and drawbacks of using llamas as pack stock. All had indicated (in the ILA questionnaire) that their unit was currently using llamas, had done so in the past, or was very interested in doing so in the near future. The results are summarized in Appendix H.

Of the units that were, or had, used llamas, about 50% were **very impressed** with the llamas abilities, 40% were **somewhat impressed** and 10% were **not impressed**. The latter (three responses) gave the following reasons why the unit was not impressed with the llamas abilities:

- one had a basic problem with using llamas, which they considered to be "non-native" pack stock in the Wilderness.
- one felt that the "cowboys" (horse users) on the unit did not give the llamas a fair chance to prove themselves.
- one felt the llamas they used were poorly trained and poorly handled.

In short, none of responses indicated that the llamas were incapable of assisting the unit in accomplishing its mission.

For the units that had not yet used llamas(but expressed an interest in doing so), the most often cited reason was **"lack of the necessary budget dollars"**.

By far the most often cited type of user (or potential user) on the unit were **wilderness/backcountry rangers and trail crews**. Most other users were mentioned only once or twice, but included wilderness managers, researchers, monitoring crews, facilities maintenance crews.

The value of llamas for carrying administrative loads is well recognized by most units responding. However, the value of llamas for improving visitor contacts, demonstrating "minimum impact techniques" and for cleaning up after other users was not often mentioned. **In general, the value of llamas as the "minimum tool" for carrying loads in some situations does not seem**

to be well recognized by most Forest Service recreation managers.

Questionnaire #2 Results (Regarding reasons for not using llamas)

Questionnaire #2 was sent to a subset of units that indicated on the initial International Llama Association questionnaire that they had never used llamas for administrative use, but that they were aware of use by both the general public and by commercial outfitters on their unit. The results of this questionnaire are summarized in Appendix I. One comment from a respondent provides the "gist" of the majority of the responses:

"Llamas are like mountain bikes-the public uses them, but we don't."

When asked if there are jobs on the unit that might be done better by using llamas to pack equipment and supplies than the way it is currently being done, there was an almost even three way split between those that said yes, those that said no, and those that did not know. If increased information were made available to the latter group, the assumption might be made through extrapolation that about half of recreation managers in the Forest Service may believe that llamas could be of assistance to them in the future to accomplish their jobs.

When asked why llamas had not been used on the unit, by far the largest response selected was that **the unit already uses horses/mules** and presumably plans to continue to do so in the future. (66%). In other words, there is a prevalent "comfort level" with the traditional pack animal by the recreation managers surveyed. Another fairly large number of responses indicated a lack of budget dollars to support the purchase or lease of llamas(42%), or that they lack the facilities necessary to house/feed them when not in use (29%). From this it can be concluded that the tendency toward the continuation of the "status quo" is probably the major reason that llama use is not growing faster in the Forest Service.

Interestingly, only four units responded that **lack of public support** contributed to their non-use of llamas (horse users and Wilderness advocates). Appendix J is an example of a letter received by one Forest Service unit from a member of the Backcountry Horsemen organization, expressing a rather radical anti-llama sentiment. Also, only three units responded that they did not believe llamas "belonged" on their unit or in their Wilderness area. Finally, only one unit reported that either first or second-hand awareness of unsatisfactory attempts at using llamas is a factor in their decision not to use them. Basically, philosophical or attitudinal barriers, either within or outside the agency, were not cited often as a reason for not using llamas to a greater degree.

One apparent anomaly in the data needs further discussion. It had been assumed that **"lack of support from superiors "** in the Forest Service organization would be a major reason why llamas were not being used to a greater degree, however only two units cited it as a contributing factor. Why? One of the comments found on one of the questionnaires provides a possible clue:

"In order to have any type of successful stock program, you have to have user-advocates on the ground."

Perhaps there is simply not a large group of advocates on the ground yet, so lack of support is not an issue in most cases. Another possible explanation, mentioned earlier, is the tendency toward the continuation of the "status quo" which can also be construed as lack of support from superiors, because of the the way the Forest Service prepares its unit budgets and the processed by which change is implemented in bureaucracies. Even though there may be some advocates out there, at the ground level, the budgets can be expected to have little room for "new programs", if the old ones continue to be funded at the same level on an annual basis. Lack of support for a new program, such as the use of llamas as pack stock, can and is being manifest as an unwillingness to change budgeting patterns, rather than as overt opposition to a proposal. If the percentage of questionnaires that listed "lack of budget dollars" is considered as "lack of support from higher levels", then suddenly that category becomes, on nearly one-half of the questionnaires, one of the primary reasons why llamas are not being used on the unit. Another comment on one of the questionnaires summarizes this possible explanation:

"Investment in tack and horses is significant. A switch to llamas will need to be philosophically important to someone making the budgeting decisions."

In all likelihood, the reason why the use of llamas is not more widespread by the Forest Service is some combination of the lack of advocates on the ground, a lack of support for change in places where advocates do exist, and the "cowboy" image that many Forest Service employees have of themselves and the agency in general. The questionnaire was not particularly useful in sorting out the frequency of the occurrence of the three reasons, but clearly shows that the combination is a major factor.

Judith Strom, in her article entitled "Llama Use by the U.S. Forest Service" states:

"In querying districts about how they got started with llamas, I found repeatedly that it was due to the efforts of one interested person, usually the District Ranger or someone involved with trail maintenance. Most often they had heard by word of mouth of successful llama use in another district. In a few cases llamas owners instigated the process by volunteering llamas to help with some special project" L4

Not only do Ms. Strom's findings support the notion that the existence of a "user-advocate" on the unit is highly desirable in getting llama use started, she also offers a hint as to how best to develop new ones on units that are currently without them. The questionnaire shows that greater than 90% of the recreation managers are interested in using llama owners and their animals as volunteers to help them accomplish the job they have to do, and about 75% say they would take the opportunity to work with the volunteers in the field on the project so they could gain a better understanding of the capabilities of llamas as pack stock.

B. Forest Service Training Needs/Opportunities

Analysis of the results of both follow-up questionnaires provides some interesting insights into what Forest Service Recreation managers feel about the need for and configuration of training in the use of llamas as pack animals by Forest Service units.

Earlier, the lack of success of the "Understanding Llamas" course offered for the last 3 years at the Ninemile Wilderness Training Center was described. While about half of the respondents to Questionnaire #1 (those with a history of llama use) were aware of the course, none had signed up. The high cost (including tuition and travel) and the amount of time necessary were the most often cited reasons for not being interested. Several also felt the level of training of their key people was already high enough that it was not needed. A few specifically cited the training they received from the supplier of their leased llamas as being good and sufficient, and still others indicated that their field people are knowledgeable enough about stock not to need specific training on the use of llamas. The indications from the Questionnaire are that the course will not be successful again in 1993 (an assumption that is supported by a lack of registrants as of mid-March, per phone conversation with the Ninemile Wilderness Training Center).

Responses to the questionnaire provide support to the notion that the centralized training approach should be abandoned in favor of the "geographic dispersal " model of instruction, where instructors move from place to place to serve students, which results in a lesser time commitment by the students and a smaller travel and per-diem cost. About half of the respondents felt that holding it closer to the unit to reduce travel time and costs would make it more likely that someone from their unit would attend. The length of the course (2 1/2 days) and the tuition cost (\$150) were not often cited as something that needed to be changed. Following are the specific locations suggested for the training to be held:

- NW Wyoming, near Jackson Hole (2)
- Central Colorado (Arapaho-Roosevelt NF) (2)
- Northern New Mexico (2)
- Northern Idaho (Grangeville)
- Bitterroot Valley, MT
- Salt Lake City, UT area

- Bishop, CA
- Cispus Center near Randall, WA
- Mt. Shasta, CA
- Bethel, ME
- Southern Colorado (Rio Grande NF)
- Paradise Ranch, Buffalo RD, near Cody, WY

Five units (the Sulphur RD and Redfeather RD in Colorado, the Stevensville RD in MT, the Salmon River District of the Klamath NF and the Libby RD in MT) offered to assist in setting up a session in their area, or to provide a Forest Service owned facility where it could be held.

The questionnaires had been designed with the assumption that two separate types of training sessions might be needed. One, as discussed above, patterned after the 2 1/2 day session for field people offered at Ninemile Training Center, and the other a 1/2 to one day "llama awareness" session for managers and others higher up in the organization as a means to help build knowledge and awareness at the level of the capabilities of llamas as pack animals. However, the results of both questionnaires showed that most of the recreation managers surveyed did not feel the latter course is needed or would be effective (60% of those responding on both questionnaires). It can be concluded from this result that the recreation managers surveyed feel that training is not particularly effective in developing interest and building a corps of "user-advocates", but rather is more useful in skill building among those who have already entered the ranks.

In summary, the results of the questionnaires indicate that llama use by the Forest Service will continue to grow in spite of some existing barriers, that the pace of growth can only be increased by the development of user advocates at the "ground level", and that volunteerism by llama users and the development of a good decentralized field level training course are both possible and desirable. The training program will require considerable planning and effective internal publicity on the front end to be successful, though the information obtained from this project should be helpful if it is done within the next one to two years.

c. Partnership Opportunities

By indicating its willingness to participate with the Forest Service in the development and implementation of a llama packing training program (see Appendix D), the International Llama Association Board of Directors acknowledges that a number of mutual objectives can be served in the process. Following are what I believe to be some of those mutual objectives:

- To expose more Forest Service employees to the advantages of using llamas as pack animals and to dispel rumor and misunderstanding about them.
- To ensure that all Forest Service employees interested in the use of llamas have a reasonable opportunity to obtain a good introductory training course that covers all the basics, at a reasonable cost in time and dollars.
- To reduce the possibility that bad experiences, because of lack of training of either the animal or the handler, with the initial trial of llamas by Forest Service units will result in decisions not to continue their use.
- To help provide a readily available and viable alternative to higher impact pack stock such as horses (or mules), and to motorized vehicles, when the use of those options are not needed to carry heavy loads or cover long distances
- To ensure that llamas used by the Forest Service are properly cared for and adequately maintained.
- To promote more positive interaction between members of the Association, the general public, and Forest Service field personnel and managers.

FSM 1584.03 documents the Forest Service policy on developing partnerships to meet mutual objectives:

The Forest Service may encourage (solicit) grants, donations, contributions, or other awards of funds to finance Forest Service activities if the primary purpose is for general public benefit and avoids conflict of interest situations.

This paper has documented the public benefit of encouraging the use of llamas on National Forest land through improved training opportunities for Forest Service employees. The International Llama Association is a non-profit organization of llama owners/users established for the primary purposes of "advancing the well-being of llamas and llama enthusiasts", with a strong emphasis on educational activity. Because the Association is not directly involved with the marketing of any product, including llamas, there is little or no opportunity for a conflict of interest to arise.

Though there are numerous authorities and mechanisms for partnership implementation available to the Forest Service, my research and discussions with fiscal specialists leads me to conclude that money for the development and implementation of training programs for Forest Service employees can be accepted by the Ninemile Training Center under the authority of the Acceptance of Gifts Act of October 10, 1978 (ref: FSM 1584.16), and collected using a simple Collection Agreement. The Ninemile Training Center would then have the full responsibility for carrying out the planning and execution of the training program, including development of the training materials and contracting (if appropriate) with qualified vendors for the conduct of the sessions. As part of this project, a list of experienced commercial and non-commercial llama packers was compiled, each of which expressed an interest in participating in the training programs. A list of those individuals and partnerships is enclosed as Appendix E, and could form the basis for establishing a "bidders list" if and when the project is implemented.

RECOMMENDATIONS

(ACTION PROPOSAL)



RECOMMENDATIONS (ACTION PROPOSAL)

A. To the leadership of the Forest Service:

1. Encourage the use of llamas by the Forest Service as lower impact alternatives to other, more traditional, pack stock and motorized vehicles in fragile country, including Wilderness. Do so by including information about the use of llamas, and their advantages and impacts, into a wide variety of workshops and training, including the Wilderness Management of Line Officers courses and Wilderness Ranger/Primitive Tool courses.

B. To the Arthur Carhart National Wilderness Training Center and the Ninemile Regional Training Center:

2. As a part of 1. above, adopt the training outline developed through this project (Appendix A) as an integral part of the National Wilderness Training program, and make it available nationwide.

3. Enter into a Partnership Agreement with the International LLama Association to develop course materials and implement a dispersed field training program, based on the outline mentioned in 2. above, beginning in the spring of 1994.

4. Utilize the list of interested commercial llamas packers provided in Appendix E as the basis for development of a "bidders list" for the implementation of the training program.

5. Consider the information obtained through the analysis of the questionnaires in this paper as a basis for selecting the number and locations of the individual training sessions. Use the existing llama "user-advocates" within the Forest Service to assist in planning and implementation.

C. To the International LLama Association

6. Extend your offer of financial support to the Ninemile/Arthur Carhart Training Center to begin in the spring of 1994 and to extend, if possible, for at least three years to allow it to become established.

7. Make the training outline developed through this project available to any and all members of the Association, and to other cooperating organizations and agencies, as a suggested training format for field level training.

8. Encourage llama owners to get themselves and their well-trained pack llamas involved with the completion of volunteer projects on National Forest and other government managed lands, as the results of the survey portion of this project indicate that may be the single most effective way to increase the number and effectiveness of "user-advocates" within the managing agencies.

D. Action Items for Project Completion

1. Obtain written permission from the authors/publishers for use of published materials proposed for inclusion in the training package to be developed (by December, 1993).

2. Develop a "prototype" training package, based on the training outline in Appendix A, for use by the Ninemile/Arthur Carhart National Wilderness Training Center (by December, 1993).

3. Report results of this project to the Ninemile/Arthur Carhart Training Center, the International Llama Association, and to other individuals and groups that have expressed an interest by copy of this report (by June, 1993).

LIST OF REFERENCES



LIST OF REFERENCES

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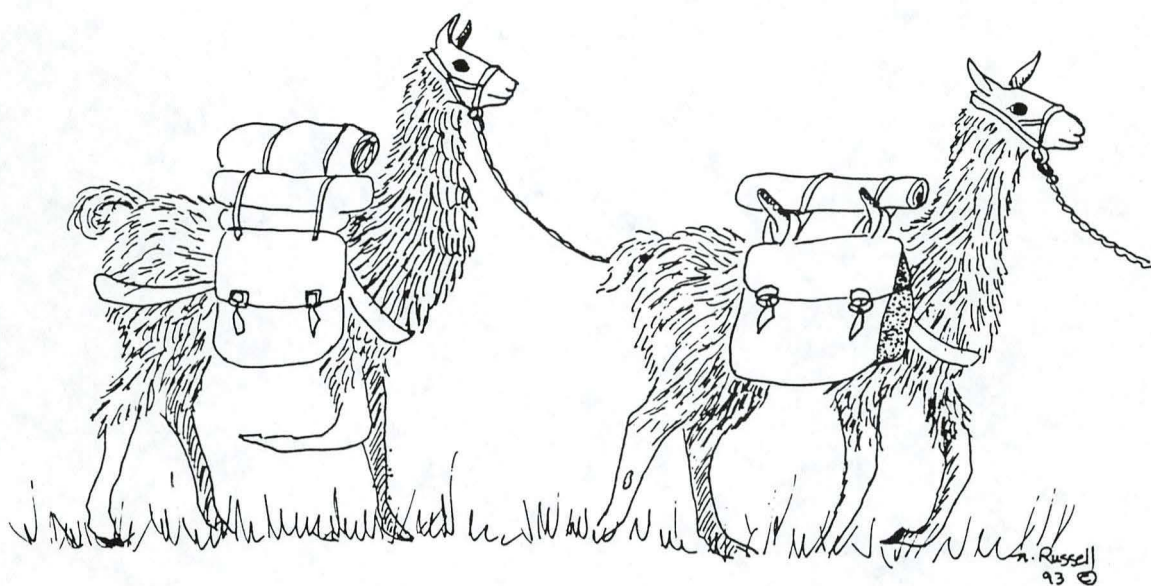
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APPENDIX

A



LLAMA PACKING TRAINING OUTLINE

-----START FIRST DAY-----

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
A Why llamas (background information)? -where they come from? -why they were bred? -who might benefit from using them? -how long have they been around? -why consider them?	NO	10 min	pp1-9	pp1-18	
B Llamas In Wilderness? -minimum "tool" philosophy -Impact levels -is llama use "nontraditional"? -can horses/llamas coexist? -do llamas detract from the "wilderness" experience? -the "feral population" risk	NO	30 min			* G
C How can they be obtained? -cost -lease/purchase options -what to look for ---gelding/stud/female? ---age ---build(strength, agility) ---personality/willingness ---degree of training ---experience ---wool length --physical soundness (see Section D)	NO	15 min	pp11-24	pp43-54	

TOPICS	DEMO?	TIME	REFERENCE	REFERENCE	NOTEBOOK
		REQUIRED	A	B	
D What are the characteristics of the Ideal pack llama?	YES	45 min	pp11-24	pp 15-24	
-parts of the llama(reference)					*C9
---foot diagram					*B21
-gait					
-unique metabolic characteristics					
-personality					
-wool/conformation					
-soundness(legs, back, etc)					
---leg conformation diagrams					*C13,14
-size(height, weight, leg length, etc)					
-willingness to pack 70-100 pounds for several hours (with rest)					
-conditioning					
---diagrams-indicators of condition					*C35
-lack of behavioral problems(see Section E)					
-The Ideally Trained/Experienced Llama					L
---leads on slack lead, does not pull back, stop, or circle on lead					
---stands still while being packed/unpacked					
---loads easily into a vehicle					
---crosses obstacles with confidence and without undue hesitation					
---does not lunge or jump across standing or running water and/or mud					
---moves gracefully and without panic over rough terrain					
---is good natured around people and not overly aggressive around other llamas					
---can be left unattended for short periods of time on a picket line					
---is neither sluggish (lazy) nor hyperactive					
---can easily be caught if he gets loose					
---will lead and follow as a member of a "string"					
---is aware of the load, avoids bumping panniers on trees/rocks adjacent to trail					
---is not overly concerned about being "solo"-will not panic if can't see other llamas					
---will allow his legs to be lifted and his feet checked					
---does not pace or run around on the picket line					
---is "rope-wise"					
---is not likely to be "spooked" by hikers/horseback riders he may meet on the trail.					
---will walk without lunging through snow/overhanging vegetation, etc					
---is accustomed to walking on bridges over flowing water					
---will drink from flowing water					

LLAMA PACKING TRAINING OUTLINE

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
-----BREAK-----					
E Llama Behavior and Behavioral Problems (Overview) -getting along with your llama -llama and human behavioral signals -coping with behavioral problems	NO	15 min			*D141-146
F How Should a LLama be Trained (Experienced)? -trust as a key factor -training philosophy (handout) -advantages of early training -sequence of training -building confidence-obstacle training/loading -desensitizing(goal-lifting the feet) -discipline/punishment -introduction of the pack saddle -advantages of "on the job training". -becoming a member of the string.	YES	45 min	pp65-87	pp55-72	* I *D177-180 *D181-184
G Conditioning (Yourself and the llama) -ideal:conditioning in the pasture(and why it often doesn't happen) -preseason trips/progressive conditioning/elevational differences -conditioning feet/muscles/respiratory system -behavioral signals of unconditioned llama in the woods -signs of fatigue/overheating and how to deal with it ---open mouth breathing ---foaming at the mouth or drooling ---lying down, stopping and refusal to continue ---heavy, labored breathing ---excessive trembling/shaking ---lack of muscle coordination	No	15 min	pp89-96	pp73-78	

-----LUNCH BREAK-----

LLAMA PACKING TRAINING OUTLINE

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
-----START AFTERNOON SESSION-----					
H Care and Feeding of Llamas when not In use In the Woods	YES	1 Hour	pp37-45	pp25-41	
-pasture/hay/nutrition					*C31-33
-dietary supplements/water					
-shelter					
-fences					
-health maintenance(sanitation/worming/vaccinations)					*C43-50
-companions/space/seperation requirements					
-catching and restraint					
---llama stanchions					*C131-137
-trail readiness (toenail trimming/foot care)					*C67
-injury prevention (fighting teeth removal)					*C49
I Using Llamas In the Woods-the Low Impact Pack Animal Philosop ND		1 hour			*G
-light on the land/leave no trace ethic					
-Should I take a llama?(tradition vs. practicality vs impact)					
-llama phsycology(why they act the way they do, interactions with other animals)					
-limitations of llamas					
-responsibilities of taking pack stock in general/llamas in particular					
-talking to folks on the trail					
-standard practices(overview of field trip)					
---low impact camping techniques					
----stay on trail/spread out when traveling crosscountry					
---tieving to trees					*C26
---free grazing or move pickets often					
---camp away from trail/fragile terraiin					
----scattering dung piles					
----grazing away from water					
---minimizing impact on others Wilderness experience					

-----BREAK-----

LLAMA PACKING TRAINING OUTLINE

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
J Safety -Safety Tips (handout) -bear country precautions -snakes, cougars, and other "undesirables" -tallus slopes -checking the packs periodically/tightening cinches -avoiding hazards -the horse/llama encounter -being alert on the trail -meeting dogs/backpackers -be firm with your llama-control him -don't surprise your llama -being prepared for the worst(extra equipment/repair supplies)	YES	30 min	pp105-120	pp108-122	* J
K Backcountry Llama First Aid and Prevention/Treatment of Illness -contents of a field first aid kit -poisonous plants(handout) -what to do if your llama is "down" -respiratory problems -injuries(sprains, cuts, breaks, eye injuries) -sore feet/lameness -gastrointestinal upsets/poisoning -heat exhaustion/dehydration -snake bites/porcupines -parasites and paracite control(tick paralysis) -saddle/cinch sores -prevention and treatment	NO	45 min	pp141-153	pp133-142	* K *C139-145 *C85-88 *C79-80 *C57-61 *C73-74 *C81-84 *C76-78 *C38-46
L Field Trip Preview and Logistics		15 min			
-----END OF FIRST DAY-----					

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
-----START OF SECOND DAY-----					
M PACK EQUIPMENT AND LLAMA SUPPLIES -halters and lead ropes ----the proper fit of the halter -packs and pads/basic types/advantages and disadvantages -chest straps/breeching/crupper -paniers/raincovers -top packing accessories(straps, bungy chords) -picket pins and stakeout/tie systems -scale -feed/water containers -grain -campboxes/coolers/other containers for supplies and food -first aid/spare equipment -trail bells(optional) -insect spray/wipe	YES	1 HOUR	pp53-64	pp79-89	*D86-87
N TRIP PREPARATION -trip checklist -feed -destination information -extra equipment -essentials -care of llamas beforehand(feet, etc) -Prevention in tick country -realistic distance expectations/loading and unloading time/route planning	NO	30 MIN	pp27-36 pp96-99	pp89-98	*B161
O LLAMA TRANSPORTATION -vehicles and trailers -loading and unloading -tied and other safety concerns (floor covering, footing) -long distance travel(feed, water, breaks) -behavior in crowded conditions -weather and temperature(heat, cold, and moisture)	YES	30 MIN	pp47-51	pp101-107	

LLAMA PACKING TRAINING OUTLINE

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
-----BREAK, LOAD UP FOR FIELD TRIP-----					
P TRANSPORTATION TO TRAILHEAD-START OF FIELD TRIP		1-2 HRS			
Q PACKING UP	YES	1-2 HRS	pp102-105	pp107-108	*C23-25
-knots -grooming llamas -loading and balancing panniers -putting the pack on/cinching -load center of gravity/lateral location on llamas back -top packing -loading bulky items -checking and rechecking -allocating and organizing loads -matching loads with llamas ability/experience/conditioning -keeping your lunch/foul weather gear/first aid kit handy -preplan the order of animals in your string -avoiding and recognizing the overloaded llama -last minute checkoff					
R ON THE TRAIL	YES	3-4 HRS	pp105-120	pp108-122	
-eating along way and rest stops -"potty stops" -crossing obstacles/bridges/water -trail etiquette -posting a lookout/avoiding unpleasant encounters with other users -"Why did my llama lie down in the trail-and what do I do about it?" -checking and rechecking cinches, readjusting loads -llamas and wildlife -llamas and "boogie men" -dealing with difficult terrain or trail conditions -dealing with wrecks and loose llamas -llamas as companions-what its all about. -llamas and streams(drinking behavior) -how to beat the heat					

TOPICS	DEMO?	TIME REQUIRED	REFERENCE A	REFERENCE B	NOTEBOOK
S IN CAMP	Yes	ovrnite	pp121-129	pp123-132	*E
-selecting an unobtrusive and low impact campsite					
-leave no trace camping techniques					
-managing your llamas for minimal impact					
---free grazing, staking, or tying					
---llama behavior (rope"knowhow", alarm calls, eating and sleeping behavior)					
---manure					
---avoiding wildlife "lanes"					
---avoiding water and wet areas					
---minimizing trampling					
---flies and other "pests"					
---picketing for extended periods or unattended llamas					
---graining, watering, etc					
-care of equipment in camp(including preventing wildlife damage and predation)					
-food and cooking(if time permits!)					

pp131-140 pp123-132

-----END OF SECOND DAY-----

T REPACKING AND "BACK DOWN THE TRAIL" YES 4-6 HRS

-----END OF COURSE-----

ABOUT THIS COURSE

This course is designed to be taught in 2 1/2 to 3 days, depending on the duration of the field trip-it can be taught in 2 days using videotape to substitute for field trip-with obvious loss of hands-on experience. It assumes very little knowledge or experience in using or caring for livestock on the part of the trainee.

SEE NEXT PAGE FOR LIST OF REFERENCES

It is assumed that the student will have or be given one of the two primary texts (A or B), and a notebook with selected other materials. The recommended video segments may be used to reduce the lecture time. It is highly recommended that the class have access to llamas throughout the course and that demonstration be used as the teaching technique of choice where possible. The course is designed to be tailored to the needs of the group. The primary assumption is made that, since llamas are low impact animals, leave no trace techniques will be an essential part of the training

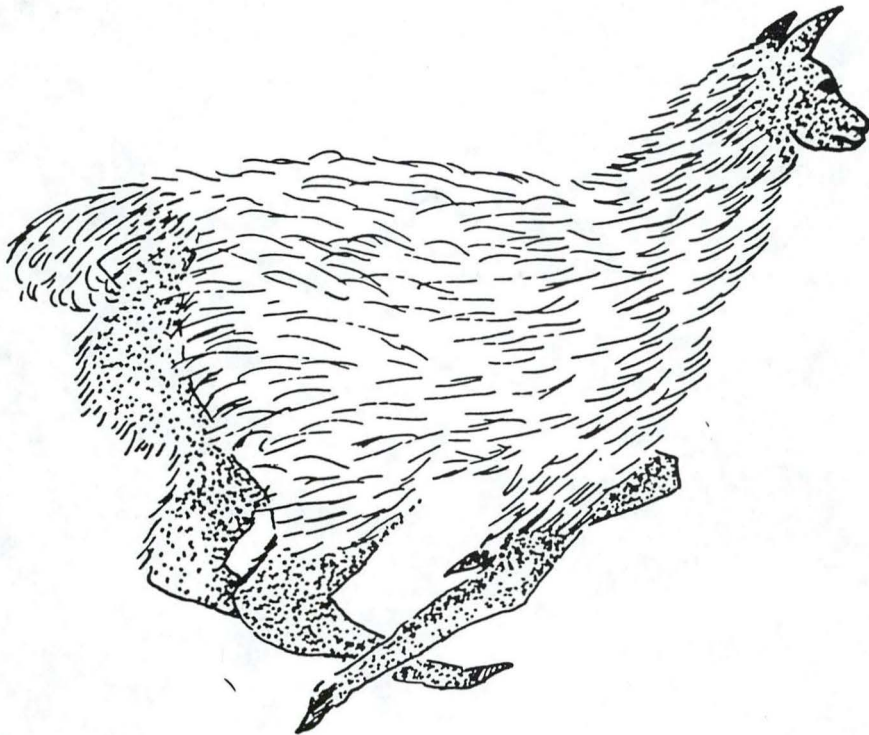
LIST OF REFERENCES AND HANDOUT MATERIAL

(Letters refer to symbols used in the preceeding outline)

- A. Packing with LLamas(Daugherty)-textbook
- B LLamas on the Trail(Harmon/Rubin)-textbook
- C Caring for LLamas: A Health and Management Guide(Hoffman/Asmus)-reference
- D Llama Training and Handling: The TTeam Approach (McGee)-reference
- E USDA Pamphlet: Leave No Trace Land Ethic-reference
- F Video-All About Llamas, Tape 3-Lets Go Packing"(Taylor/Gavin)
- G Forest Service Region 6 LLama Policy Background Data (handout)
- H International Llama Association Brochure "Books, Videotapes and Magazines al
Llamas and Alpacas (handout)
- I Training Philosophy (handout)
- J Safety Tips (handout)
- K Backcountry First Aid (LaRue Johnson, DVM)-handout
- L The Characteristics of the Ideally Trained and Experienced Llama-handout

APPENDIX

B



Questionnaire Summary

Use of LLamas on Public Lands

International Llama Association

11/92

Sent- 740 separate Units(two mailings to some).

Returned- 274 (37%) (Note: some responses covered more than one unit, so the actual percentage of units for which a response was obtained is larger than 37%).

Some Use Reported- 187 units(68%)

No Use Reported- 87 units (32%)

Public Recreation Use- 154 units(56%)

Agency Use- 22 units (8%)

- 3 reported llama ownership by Forest Service
- additional 9 reported plan or desire to use
- additional 6 reported past satisfactory use
- none reported past unsatisfactory use

Commercial (Outfitter-Guide) Use- 72 units (26%)

- additional 8 indicated interest had been expressed, but no permit issued.
- one indicated illegal(unpermitted) use

Use Reported by Area of the Country

Area /	Total Response	/ No Use	/ Public Use	/ Agency Use	/Comm Use
1 (CA)	24	5(21%)	17(70%)	1(4%)	7(29%)
2(NW)	53	11(21%)	37(69%)	2(4%)	19(36%)
3 (IM)	76	18(24%)	49(64%)	8(10%)	16(21%)
4 (SW)	34	13(38%)	14(41%)	4(11%)	6(16%)
5 (RM)	45	5 (11%)	36(80%)	7(16%)	21(47%)
6 (C)	16	15(94%)	1(6%)	0	0
7 (NE)	7	1(14%)	4(57%)	1(14%)	2(29%)
8 (SC)	8	8(100%)	0	0	0
9 (SE)	15	11(73%)	2(13%)	0	2(13%)

Total # of States Reporting -32

States Reporting by Area:

Area 1- California (CA)
Area 2-Northwest (WA, OR,AK)
Area 3-Intermountain(ID, MT, UT, NV)
Area 4-Southwest(AZ, NM)
Area 5-Rocky Mountain(CO, WY)
Area 6-Central (PA,SD,KY,MI,MO,WV,NE,KS,IL)
Area 7-Northeast(VT,NH,ME)
Area 8-Southcentral(TX,LA,AR)
Area 9-Southeast(FL,GA,SC,VA,NC)

RESTRICTIONS

Trail Restrictions Reported- 33

No explanation-8
Designated Hiker Trails,all livestock- 14
Most or All trails, all livestock-1
Fragile Areas(Tundra,etc), all livestock-2
Public Safety, all livestock-3
All Terrain Vehicle trails, all livestock-1
Specific Scenic or National Trails, all livestock-2
Specific Wilderness trails, all livestock-2
Trails for disabled persons, all livestock-3
Restrictions specific to Llamas only-0

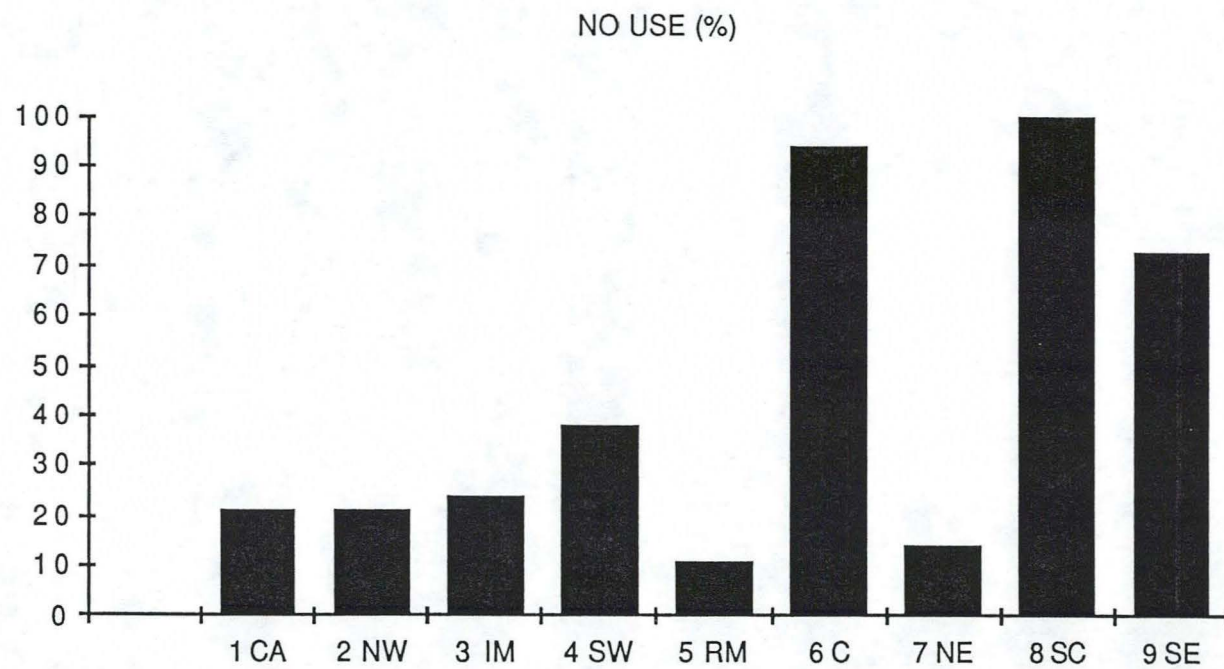
Campsite Restictions Reported-110

No explanation-30
Developed campgrounds and Rec sites-72
Near water(200 ft)-1
Near designated Wilderness campsite(200 ft)-2
Limited to areas where stock handling facilities provided-2
"Hiker Only" camps-1
Same restrictions as dogs(on leash)-2
Specific restrictions on llamas-0

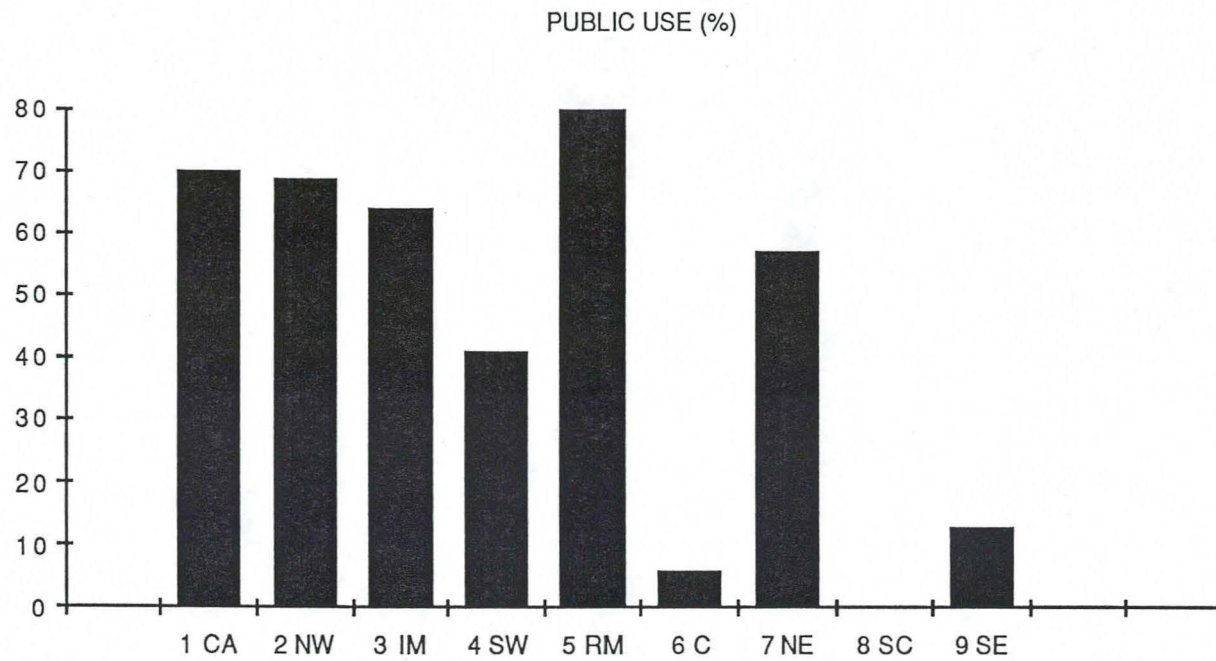
Area Use Restictions Reported-33

No explanation-18
Specific portions or total Wilderness Areas(all stock)-3
Specific sensitive areas(Watersheds, tundra, reveg. area)-3
other(beaches, roads, etc)-5
"Foot Only" areas-1
Day-Use areas(closed to camping and all stock)-3
Specific restrictions on llamas (or "exotics")-0

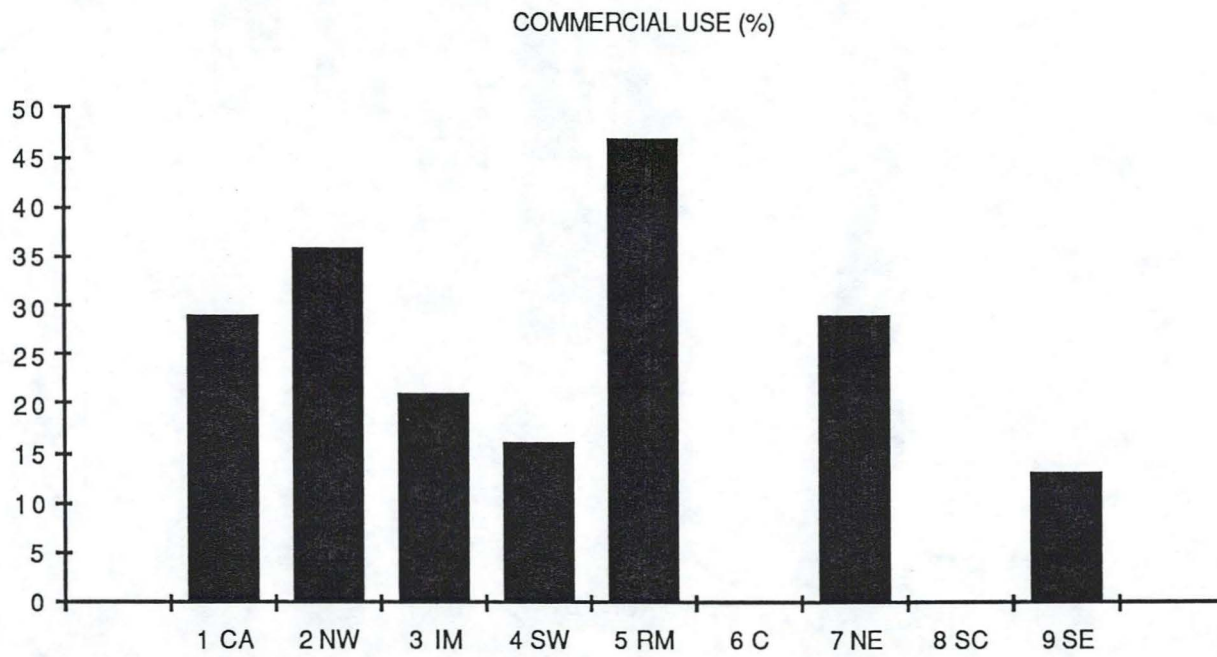
PERCENT NO LLAMA USE REPORTED BY REGION OF COUNTRY



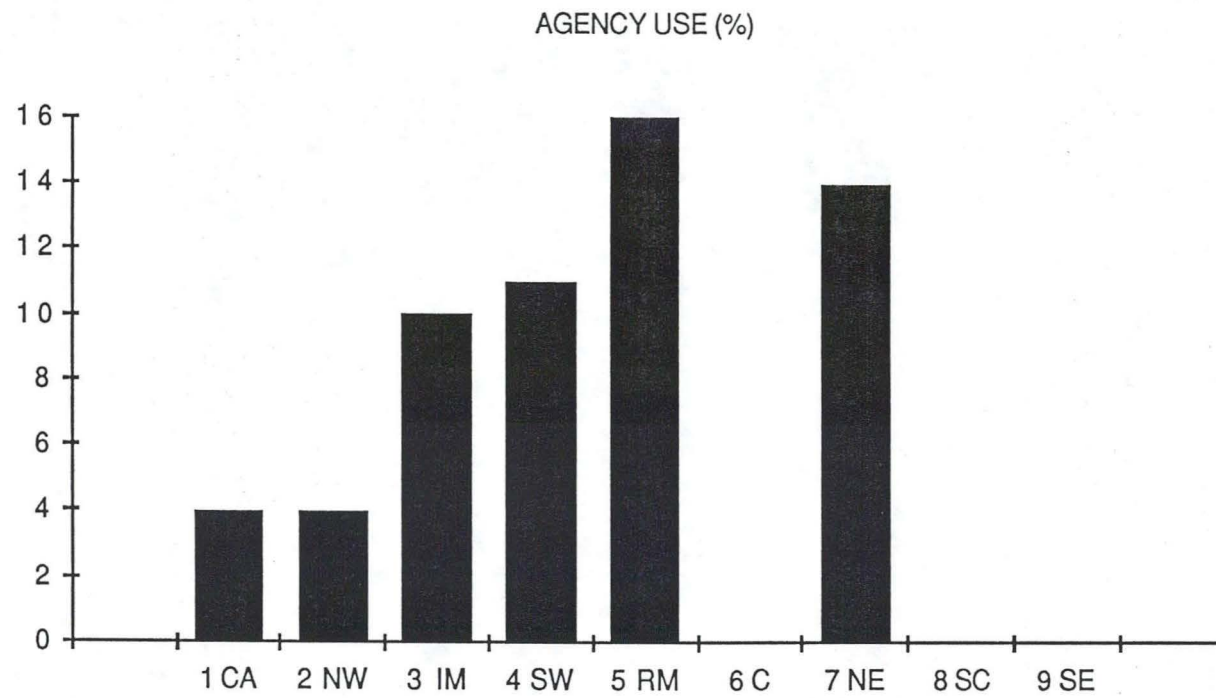
PERCENT PUBLIC USE REPORTED BY REGION OF COUNTRY



PERCENT COMMERCIAL USE REPORTED BY REGION



PERCENT AGENCY USE REPORTED BY REGION OF COUNTRY



APPENDIX

C



nr90'

November 10,1992

Board of Directors
International Llama Association
P.O. Box 37507
Denver, CO 80237

Dear Friends:

Enclosed for your consideration is a marketing /partnership proposal that I hope you will give serious consideration. I have worked closely with the other members of the ILA Packing Committee in putting this together, and have incorporated their ideas into it.

As you know from working on the Importation issue, the ILA (as a "new" livestock group) must work harder than others to establish itself as a recognized and respected organization with the likes of USDA and USAHA. The same is true for llama packers-we must expend a lot of energy to establish ourselves as a "legitimate" user group on public lands, and with public land management agencies such as my employer, the Forest Service. I hope you agree that there is a role in that for ILA(those of you who were on the BOD when I was, have heard this all before!).

The enclosed proposal is an opportunity whose time has come, for a variety of reasons. For one, we can get in on the ground floor of the establishment of a Forest Service National Wilderness training program at Ninemile, MT with a llama packing training course. Second, I have the approval of the Forest Service to work on the project at the agency's expense, since I am doing it as a project for a course I am working on at Clemson University. And finally, the results of the ILA Packing Committee survey of all Forest Service offices in the United States backs up what I have believed for the last two or three years to be true-that llama use, especially in the west, is growing rapidly; but the use by my agency lags behind. I think the simple reason for that is lack of information and support by managers at the "ground" level. I think ILA can make a big difference, with a relatively small investment.

Of course, the big question is "What's in it for ILA?" First, and foremost, we can accelerate the development of a core of "llama advocates" within the Forest Service. That will serve to ensure that the needs of llama users are more quickly understood and incorporated into planning efforts. In other words, individuals applying for commercial llama packing permits will likely receive better and quicker consideration, and the needs of individual llama packers will not be forgotten when decisions are made on facility development and trail regulations. Secondly, increased use by the Forest Service will mean a direct positive economic impact on ILA members that lease or sell pack animals to the agency, as well as those who are selected to put the proposed training sessions on for the Forest Service employees. Thirdly, once developed and tested, the training outline and materials would be available to all ILA members, and other agencies and groups who want to learn or teach others how to pack with llamas. And finally, the exposure of the public to more and more llamas doing useful work in the National Forests of the country will have a indirect, and I think significant, positive effect on the marketing of all llamas.

I hope you can find a way to support this project. I intend to do a followup on the ILA questionnaire, develop the training outline and gather the materials as a part of my project for the Forest Service. However, it will not be possible for the Ninemile Training Center to actually produce the training materials, select some trainers and put on the sessions this next spring/summer without ILA's financial commitment by about January (see the time line , Section III, and the first year budget, Section IV, of the enclosed proposal).

Thanks for your consideration. I think the current events on the Tonto National Forest, where there is currently a precedence setting proposal by the Forest Service to ban the use of llamas in a designated Wilderness area, illustrates the urgent need for more and better knowledge on the part of managers in my agency. I am available to answer any questions you may have-don't hesitate to call me.

Sincerely,

Bob Russell

P.S. I have also enclosed a preliminary summary report of the results of the ILA use survey (mentioned above) that I put together as a member of the ILA Packing Committee. I think you will find it interesting!

cc: Stanlynn Daugherty
ILA office(Sandy Chapman)
Peter Illyn

PROPOSAL
LLAMA TRAINING COURSE FOR PUBLIC LAND MANAGERS
International Llama Association
11/92

I. Summary of Proposal

This proposal is for the joint development of a training course for public land managers by the USDA Forest Service and the International Llama Association. The use of llamas by Forest Service personnel is not growing at the same rate as the use of llamas on the National Forest by the general public and by commercial outfitters and guides. One reason for that appears to be the lack of readily available, inexpensive and convenient training opportunities within the Forest Service for its lower grade personnel-those who would actually encounter and/or use the animals in the woods. Another seems to be that many managers are not aware of the potential for llamas to be useful in getting the job done. The Forest Service would benefit from the proposal by having a means to obtain the desired training, and the ILA would benefit by the transfer to good information to agency personnel, who would most likely become advocates for llamas once they are successful in using the animals for the various tasks to which they can accomplish. The Forest Service National Wilderness Training Center at Ninemile, Montana provides a mechanism to plan and conduct the training. There is a need for money to develop the course materials, publicize the course, and conduct the initial "shakedown" series of training sessions. Once developed, this proposed training course would be available for the use for other agencies and user groups that desire to know the "whys" and "hows" of llamas use . **It is proposed that the ILA contribute up to \$3500, to be matched by a Forest Service contribution of personnel time , materials, and equipment to plan, develop, and coordinate the conduct of the course in 1993. A preliminary commitment of \$2000 per year for the next two years is also proposed for conducting the course, pending a favorable annual evaluation by ILA.**

II. Purpose and Need

A recent ILA conducted questionnaire polled all Forest Service units in the United States to determine the level of use that llamas are receiving on the unit , and what the unit's policies are as to their use (see enclosed summary). Nationwide, 56% of the Forest Service employees completing the questionnaire are aware of private public recreational use of llamas on their unit, and 26% know of commercial llama use on the unit. At the same time, only about 10% have, or are using llamas themselves to accomplish work on the unit. There is a significant, but as yet undetermined amount of interest by agency employees in using llamas in the future.

The Forest Service is currently entering into an intensive effort to become more effective in the management of Wilderness area through education of it's personnel and the public about ways to decrease the impacts of recreation use in those areas. Llamas are a lower impact alternative in many cases to the use of horses and mules as pack stock. However, the Forest Service has little experience with using llamas, and there are a number of barriers to obtaining that experience. Some of these include lack of money and lack of understanding about how to obtain the information and equipment needed for an effective start at using llamas. Some managers have a bias against the use of llamas, mostly originating from a lack of good information, and may not support their use by people on the unit.

The Ninemile Wilderness Training Center in Montana has for the past few years been a Regional training center for the Forest Service in the Montana-Northern Idaho Region. As such, it has offered many courses in Wilderness management principles and techniques, including such things as horsemanship, use of primitive tools, low impact camping techniques, etc. It has just recently (October, 1992) been designated as the Forest Service National Training Center for Wilderness, and given the task of developing training courses that can be used nationwide. A recent conversation with the person in charge confirmed that there is an interest in developing a llama training program, but that it is not a high priority for funding by the Forest Service.

For the last 3 years, a three day llama packing clinic has been offered and scheduled at Ninemile to train new Forest Service llama users in the fundamentals and techniques of llama packing. ILA member Dave Harmon (assisted by Bob Russell) developed a training outline and was scheduled to present the course at the Ninemile center. Because of the funding situation at Ninemile, all such courses must be self-supporting, so a minimum of ten trainees were needed to offer the course. Each year, fewer than ten trainees signed up and the course was cancelled. According to Bob Holverson, the training center director, there was much interest, but the timing, length, and cost(including travel to Ninemile) were prohibitive. As expected, the interested people were mostly lower graded employees interested in starting to use llamas, but unable to get the support from supervisors and managers to spend the money and time to attend.

The experience described above indicates that a better approach would be to develop a training outline and course materials that could be used by any qualified llama packer (with good instructional skills) to present the training needed by these employees closer to home, at a reduced cost in time and money. The results of the ILA survey also lead to the conclusion that perhaps two courses are needed-one to familiarize the agency personnel with llamas and the advantages of their use (since the majority are likely to encounter them in the woods), and another to actually train the field people on the techniques needed to train and use llamas themselves. These courses can be sponsored and administered through the Ninemile Training Center for Forest Service, and potentially other agencies and groups. Mr. Holverson has said that he is very interested in coordinating the courses, though he feels that some financial assistance is needed initially to make it feasible to offer them in 1993.

III. Specific Actions Proposed and Time Line

November, 1992. Proposal and questionnaire summary finalized by **Bob Russell**.

November, 1992. **ILA Packing Committee** obtain preliminary approval for ILA participation from the **ILA-BOD**.

December, 1992. **Bob Russell** conduct phone interviews with questionnaire respondents on units that either are currently or plan to use llamas to determine what they need to know and whether they would be interested in participating in the initial training sessions. Also, develop another short questionnaire for a sample of those units that are not currently using or planning to use llamas(in areas of the west with high public use) to determine if the availability of training is likely to change that situation.

December, 1992. **Bob Russell** modify existing training outline based upon the information obtained above, and send it to about 5 experienced llama packers/trainers for input. Obtain responses to new questionnaire.

January, 1993. **Bob Russell, with packing committee** help, finalize training outline and obtain rights to use various training materials. Report responses to new questionnaire to ILA.

January, 1993. **ILA-BOD** enter into agreement with the USDA Forest Service(**Ninemile Training Center**) to provide funding for producing training materials and publicizing and conducting initial round of sessions. **Packing Committee** obtain information as to the availability of experienced packer/trainers to conduct sessions. **Ninemile** hire trainers, based on recommendations from ILA packing committee and announce the availability of the training sessions.

February, 1993. **Ninemile Training Center** schedule and arrange the training session based on phone surveys , response to announcements, and availability of qualified instructors. **Bob Russell and ILA packing committee** finalize training materials. **Ninemile** produce training materials in sufficient quantity to meet anticipated 1993 needs. **Ninemile** distribute announcements and begin taking registration for the courses.

March, 1993. **Ninemile** make final arrangements for course presentations.

April, May, June, 1993. **Ninemile** conduct courses.

July, 1993- January 1994. **ILA packing committee** evaluate the courses through evaluation forms filled out by participants and phone interviews. Report back to **ILA Board**. **ILA Board** decide whether to extend agreement an additional year.(second contribution needed January, 1994 if extended). **ILA packing committee** and **Ninemile** modify course outline and materials if needed.

IV. Estimated Budget(1st year)

A. Task #1- Followup on ILA survey

Forest Service contribution- \$1000 (Bob Russell salary, telephone and mailing costs, as part of ongoing project for recreation shortcourse at Clemson University).

ILA contribution- none.

B. Task #2 - Develop training outlines and materials, including video with segments of existing training videos(by permission of producers) and notebook of selected printed materials.

Forest Service contribution- \$2000 (Bob Russell salary and associated costs, as part of ongoing project at Clemson University , review by Ninemile Training Center, etc).

ILA contribution- \$1000 (costs of video and training notebook development such as editing, design and production of prototype. Excludes volunteer time and incidental Packing Committee expenses in reviewing proposed materials).

C. Task #3- Planning, publicizing and conducting training sessions for Forest Service employees in the spring of 1993. (estimated 20-50 trainees).

Forest Service contribution- \$2000 (salary and expenses for employees at Ninemile Wilderness Training Center. Note-these expenses may be passed along to trainee's units thru a small tuition fee).

ILA contribution- \$2500 (total-assumes 3 to 4 sessions. Excludes volunteer time and incidental expenses of Packing Committee for assisting in the recruiting of trainers and evaluation of the course).

Breakdown:

production of course materials- \$500
fee for trainers- \$1500
travel expenses for trainers- \$500.

Summary of Proposed 1993 budget:

A followup on the ILA questionnaire will be fully funded(\$1000) by the Forest Service to determine estimate of training needs. A quality training outline with supporting materials can be developed at a total cost of \$3000, of which \$1000 is proposed to be provided by ILA in exchange for right to produce and use the materials developed. The training courses can be offered and conducted for 20-50 Forest Service employees in 1993 by the Ninemile Wilderness Training Center for an additional cost of \$4500, of which \$2500 is proposed to be provided by ILA for the first year.

Funding Options:

OPTION 1- develop the training outline and the prototype materials;

total Forest Service contribution- \$3000
total ILA contribution- \$1000

OPTION 2- develop and produce the training materials and conduct an initial round of training sessions for Forest Service employees in 1993:

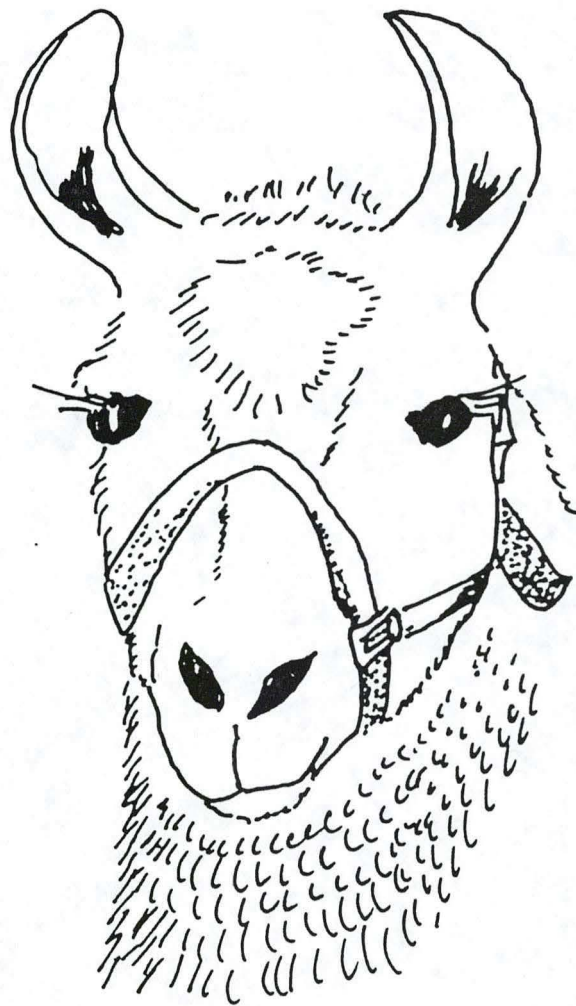
total Forest Service contribution-\$5000
total ILA contribution- \$3500

V. Expected Outcomes (if fully funded).

It is expected that between 20 and 50 Forest Service employees and/or volunteers will receive the training the first year and that the number will increase the following two years if the agreement remains in place. It is further expected that the sessions will become self-supporting by 1996 through its successful implementation by Ninemile Training Center. Managers who take the introductory course will have a better idea about the potential of llamas to help get the work done in the field and will better support their unit employees in using llamas. The employees that take the courses will be better prepared to deal with llama users on their units and to use the animals themselves. The increased exposure to llamas and their capabilities will lead to many new advocates of llamas within the Forest Service and an increasing rate of use. The increased use of llamas by the Forest Service will lead to more business for ILA members that lease animals, and to quicker and possibly more favorable decisions by Forest Service managers on commercial llama packing applications (due to a better information base). Increased use of llamas by the Forest Service, and resulting exposure to the public, will have a positive effect on the marketing of pack animals and llamas in general. Once the course materials are prepared, tested and revised, the course(s) will be available to other agencies, groups, and individuals for their use.

APPENDIX

D





April 30, 1993

Administration

Sandy Chapman
General Manager
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(606) 873-0239
Fax (606) 873-0239

Mr. Bob Russell
Salmon National Forest
Salmon Ranger District
Box 729, Hwy 93S
Salmon, ID 83467

Dear Bob:

The Board of Directors of the International Llama Association reviewed and discussed your proposal titled "Llama Training Course for Public Land Managers" at both their November, 1992, and March, 1993, Board meetings.


The reaction of the Board has been very positive toward the project's concept. Questions and modifications have been discussed, and your additional input considered.

While the availability of funds, and decisions as to their distribution, requires an ongoing balancing act to assure consideration of the many deserving projects, the Board has been enthusiastic about the need for and benefits of this proposal.

I feel confident in saying that, should funding in 1993 be available, this proposal would be quite favorably considered.

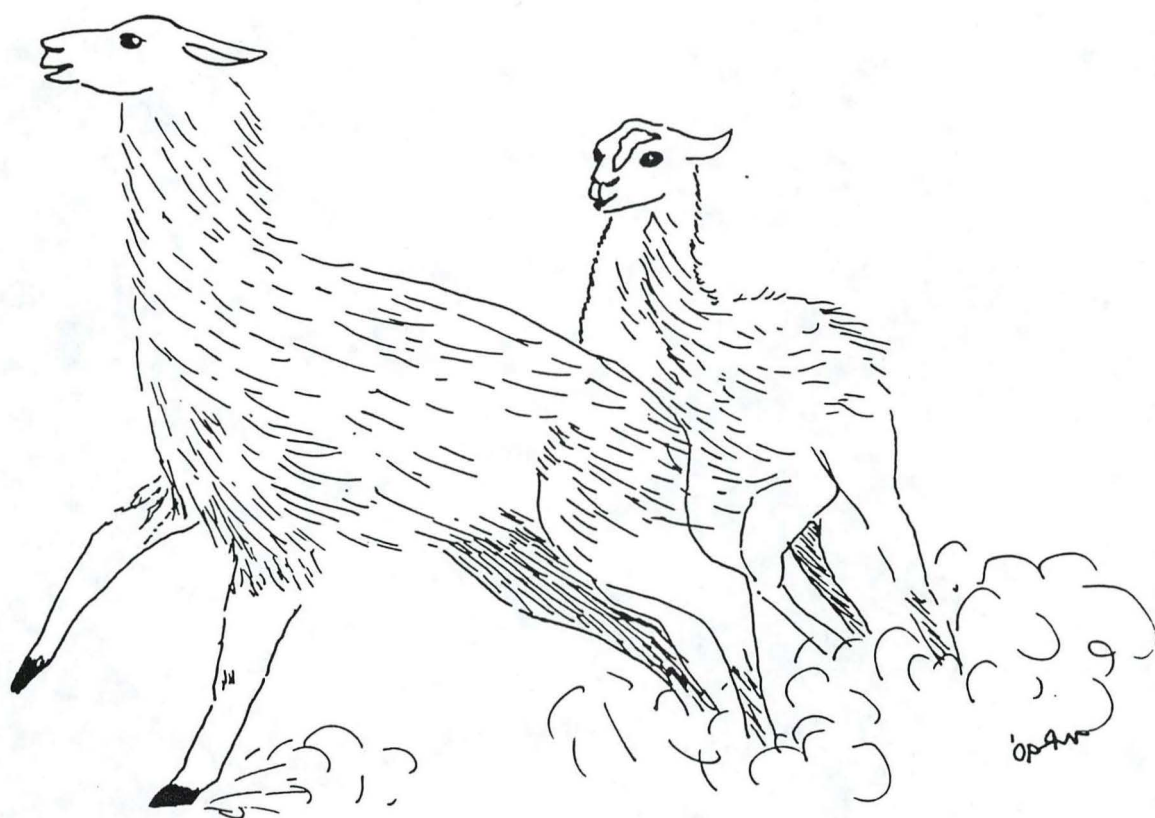
Thank you for your assistance.

Sincerely,


Sandy Chapman
General Manager

APPENDIX

E



«DATA datafile potential instructors»

1

December 24,1992

«fullname»
«farmname»
«address»
«city», «state», «zip»

Dear «name»:

Season's Greetings!!

Recently, working with the International Llama Association's Packing Committee, I submitted a proposal to both to my employer, the USDA Forest Service, and to ILA for the joint development of a training course for public land managers on the characteristics and use of llamas as pack animals in the backcountry. Both have now expressed support for the proposal, and I will be working on it this winter as a part of a project to meet the requirements of a Forest Service Recreation Management course I am taking at Clemson University. I am writing to you to ask for your input regarding what should be included in the training course, and to determine whether you would be interested in participating as an instructor if and when the course is offered this spring. Following is a little background information taken directly from the proposal I submitted to the ILA Board of Directors in November:

"The Forest Service is currently entering into an intensive effort to become more effective in the management of Wilderness areas through education of it's personnel and the public about ways to decrease the impacts of recreation use in those areas. Llamas are a lower impact alternative in many cases to the use of horses and mules as pack stock. However, the Forest Service has little experience with using llamas, and there are a number of barriers to obtaining that experience. Some of these include lack of money and lack of understanding about how to obtain the information and equipment needed for an effective start at using llamas. Some managers have a bias against the use of llamas, mostly originating from a lack of good information, and may not support their use by people on the unit.

The Ninemile Wilderness Training Center in Montana has for the past few years been a Regional training center for the Forest Service in the Montana-Northern Idaho Region. As such, it has offered many courses in Wilderness management principles and techniques, including such things as horsemanship, use of primitive tools, low impact camping techniques, etc. It has just recently (October, 1992) become the home of the Forest Service National Training Center for Wilderness, and given the task of developing training courses that can be used nationwide. A recent conversation with the person in charge confirmed that there is an interest in developing a llama training program, but that it is not a high priority for funding by the Forest Service.

For the last 3 years, a three day llama packing clinic has been offered and scheduled at Ninemile to train new Forest Service llama users in the fundamentals and techniques of llama packing. ILA member Dave Harmon developed a training outline and was scheduled to present the course at the Ninemile center. Because of the funding situation at Ninemile, all such courses must be self-supporting, so a minimum of ten trainees were needed to offer the course. Each year, fewer than ten trainees signed up and the course was cancelled. According to Bob Hoverson, the training center director, there was much interest, but the timing, length, and cost(including travel to Ninemile) were prohibitive. As expected, the interested people were mostly lower graded employees interested in starting to use llamas, but unable to get the support from supervisors and managers to spend the money and time to attend.

The experience described above indicates that a better approach would be to develop a training outline and course materials that could be used by any qualified llama packer (with good instructional skills) to present the training needed by these employees closer to home, at a reduced cost in time and money. The results of a recent ILA survey also lead to the conclusion that perhaps two courses are needed-one to familiarize the agency personnel with llamas and the advantages of their use (since the majority are likely to encounter them in the woods), and another to actually train the field people on the techniques needed to train and use llamas themselves. These courses can be sponsored and administered through the Ninemile Training Center for Forest Service, and potentially other agencies and groups. Mr. Hoverson has said that he is very interested in coordinating the courses, though he feels that some financial assistance is needed initially to make it feasible to offer them in 1993."

As you can see, the mechanism exists to establish a good partnership between the two groups. The ILA survey mentioned (summary enclosed) provides me the names and addresses of Forest Service employees who may be interested in the training-so my role is to establish the training outline, line up the potential attendees, and determine the best locations at which to offer it. The role of the ILA, which has been approved by the ILA Board of Directors will be to provide the financial assistance necessary to pay some of the costs of the training this spring. And finally, the role of the Ninemile Training Center will be to actually produce the training materials, and coordinate and conduct the training. While the Forest Service (through the Training Center) will actually hire the instructors, probably through the advertisement and award of one or more contracts, I have agreed to attempt to locate potentially qualified instructors in various locations throughout the Country and provide that information to them for their " potential bidders " list.

Given the above, my first request of you is that you allow me to review any training outlines you may have been developed in the past for similar such endeavors(I have the one developed by Dave Harmon for the course described earlier, and the one developed by Charlie Hackbarth and Jay Rais for the Spokane Conference packing workshop). I would also be interested in obtaining any written material, photographs, and/or unpublished video footage that you feel would make good training aids. (I plan to review all of the commercially available material that I have access to, and obtain permission to use that which fits well into the outline.) The intent is to develop, and make available (through both the Forest Service and the ILA), a comprehensive training outline and associated notebook(and perhaps video) that any experienced llama packer could obtain and use (assuming some level of instructor skills) for most any

group of potential or novice llama users. Remember, the likely outcome will be to develop two separate courses -one an "awareness" session a few hours in length, and one a 2-3 day "hands-on" session for those who want to learn the "nitty-gritty" of packing with llamas in the backcountry.

I am sending this letter to you, and a number of other llama packers, because I believe you may have the interest, experience and skills to instruct one or more of these sessions if and when they are held this spring. The best time to have the training will most likely be late spring, early summer (May 1- June 30). If you would be interested, have the time, and agree that you have the necessary skills to instruct one or more of these sessions, please write me and I will pass the information on to those responsible for hiring instructors/contracting the sessions. Also, if you have any limitations on how far you would travel, or how long a session you would be willing to instruct, please let me know that also.

I have attached a list of those to whom I have sent this letter. If you know of other potentially interested and qualified instructors, please either pass a copy of this letter to them, or let me know how to contact them.

Thanks in advance for helping me on this project.

Sincerely,

Bob Russell

Addressees:

ILA Board of Directors (for information)

David Harmon, LLama Adventures, PO Box 8342, Missoula, MT 59807

Scott Woodruff, Lander LLama Co., 327 Washington St., Lander, WY 82520.

Stan Ebel, Buckhorn LLama Co., 7902 NCR 27, Loveland, CO 80538

Stanlynn Daugherty, Hurricane Cr. LLamas, 63366 Pine Tree Rd., Enterprise, OR 97828.

Charlie Hackbarth, Mt Sopris LLamas, 20 N. 4th, Carbondale, CO 81623.

Bill Redwood, Redwood LLamas, Box 518, Mancos, CO 81328

Judy Fee, Noah Llama Treks, PO Box 641, Valle Crucis, NC 28691

Wes Mauz, Timberline LLamas, 30361 Rainbow Hills Rd., Golden, CO 80401-9710.

Will Gavin, Yellowsone LLamas, Box 5042, Bozeman, MT 59717.

Tom Landis, Oregon LLamas, PO Box 6, Camp Sherman, OR 97730

Greg Doner, High Llama Wilderness Tours, 2500 Millway Dr., Boise, ID 83709

Wes Holmquist, The Llama Connection, 4945 Chinook, Pocatello, ID 83204.

Doyle Markham, Snake River LLamas, 7626 N. 5 W., Idaho Falls, ID 83402.

Peter Jensen, Jensen Guide Services, HC 66, Box 14K, Island Park, ID 83429.

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Dick Reichle, Ollie Llamas, 2765 Hwy 91 N., Dillon, MT 59725
Micheal and Kari Black, Teton Llamas, 673 N. 4200 E. , Rigby ID 83442.
Peter Nichols, Elk River Valley Llama Co., PO Box 674, Clark, CO 80428.
Ellen Sloan, Lumpy Ridge Llamas, Box 933, Estes Park, CO 80517
Bobra Goldsmith, Rocky Mountain Llamas, 7202 N. 45th St., Longmont, CO
80503.
Peter Illyn, 6308 NE 88th St., Vancouver, WA 98665
Steve Rolfing, Great Northern Llamas, 1795 Middle Road, Columbia Falls, MT
59912
Francie Greth-Peto, Mama's Llamas, PO Box 655, El Dorado, CA 95623
Phred Bartholomael, Blue Mesa Llamas, 1711 E. Earli Dr., Phoenix, AZ 85016
Terry Price, Price Llamas, 2259 County Rd #220, Durango, CO 81301-
8019
Hillary Ware, Hill and Gully Llamas, RFD 1, Box 7094, Norway, ME, 04268
Tonia Wolfe, 281451 Mill Creek Rd., Prineville, OR 97754
Lindsay Chandler, Northern Vermont LLama Co., RD 1, Box 544, Waterville,
VT 05492
George Appenzeller, Magic Llama Treks, 3438 Blossom St., Columbia, SC
29205

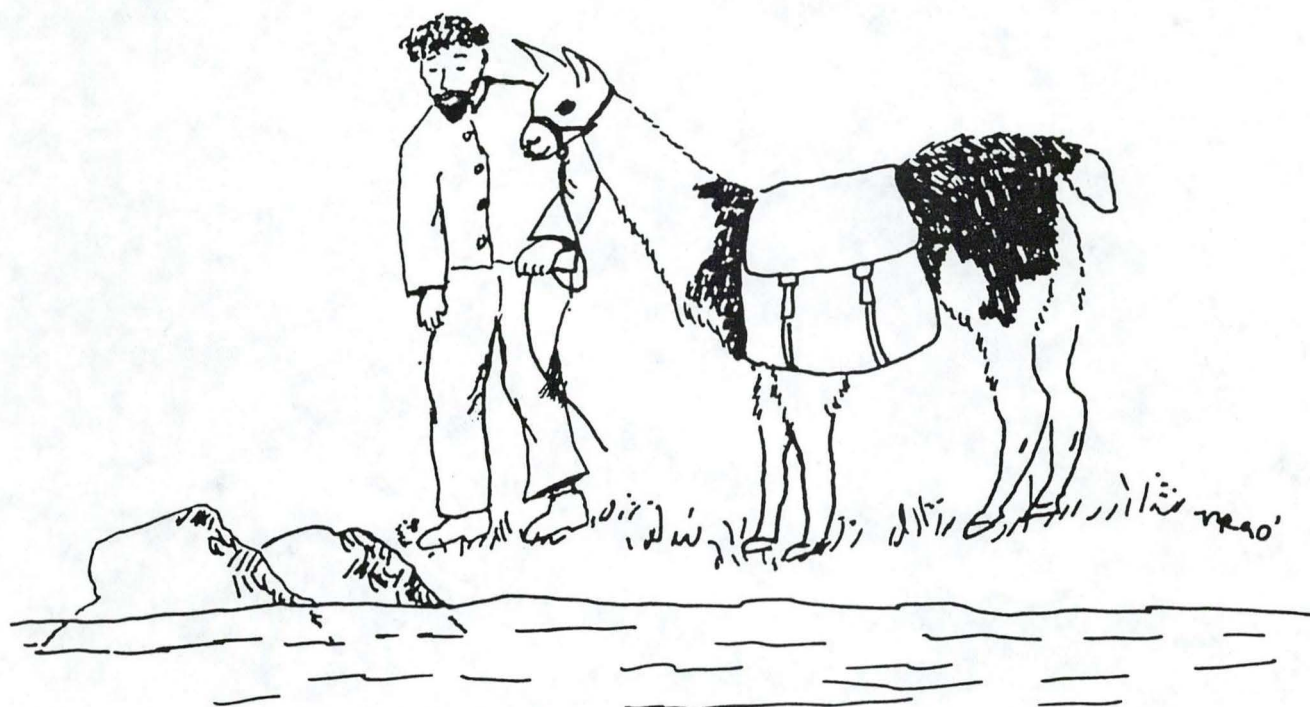
LIST OF PROSPECTIVE TRAINERS
MARCH, 1993

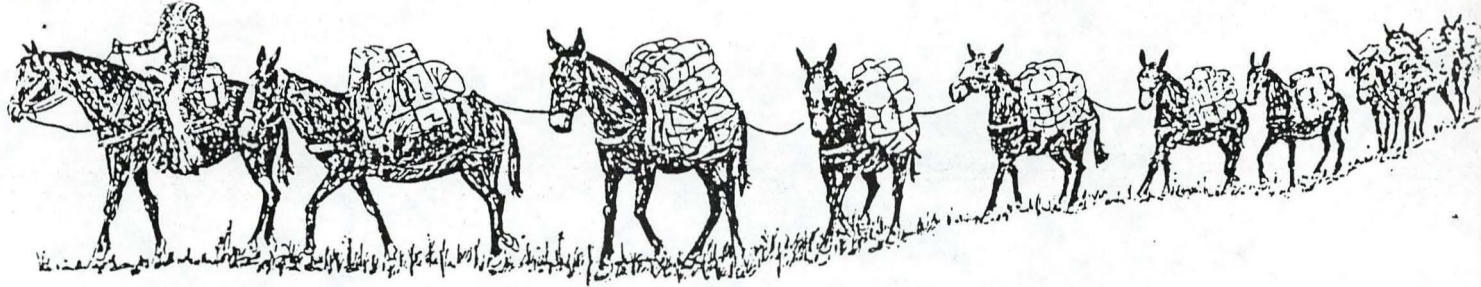
Of the 28 llamas packers (commercial and noncommercial) known by me to be qualified to teach a hands-on training session for the Forest Service (see letter dated December 24 , 1992) **the following contacted me in response and indicated a positive interest in participating in the proposal:**

- Lindsay Chandler, Northern Vermont Llama Company, RR 1, Box 544, Waterville VT 05492.
- Steve Roling, Great Northern Llamas, 1795 Middle Road, Columbia Falls, MT 59912
- George Appenzeller, Magic Treks, P.O. Box 6876, Columbia, SC 29260
- Doyle Markham, Snake River Llamas, 7626 North 5th West, Idaho Falls, ID 83401-5642
- Kari Black, Teton Llamas, 673 N. 4200 E., Rigby ID 83442
- Stan Ebel, Buckhorn Llama Co, 7902 NCR 27, Loveland, CO 80538
- Bobra Goldsmith, Rocky Mountain Llamas, 7202 N. 45th St., Longmont, CO 80503.
- Bill and Jan Redwood, Redwood Llamas, Box 518, Mancos, CO 81328
- Dave Harmon, Llama Adventures, P.O. Box 8342, Missoula MT 59807
- Scott Woodruff, Lander LLama Co., 327 Washington ST. Lander, WY 82520.
- Tom Landis, Oregon Llamas, P.O. Box 6, Camp Sherman, OR 97730
- Will Gavin, Yellowstone Llamas, Box 5042, Bozeman, MT 59717
- Francie Greth-Peto, Mama's Llamas, P.O. 655, El Dorado, CA 95623
- Greg Doner, Idaho's High Llama Wilderness Tours, 2500 Millway, Boise, ID 83709.
- Charlie Hackbarth, Mt. Sopris Llamas, 0270 Co. Rd 111, Carbondale, CO 81623.
- Peter Jensen, Jensen's Guide Services, HC 66, Box 14K, Island Park, ID 83429.

APPENDIX

F





NINEMILE WILDLANDS TRAINING CENTER

REGION ONE, LOLO NATIONAL FOREST, NINEMILE RANGER DISTRICT, BOX 616, HUSON, MT 59846

Course: Ninemile-10

UNDERSTANDING LLAMAS

May 6-8, 1991

This is a hands-on training session that will allow participants to decide if llamas would be an efficient and necessary tool in helping manage their lands. Participants will gain a better understanding of increasing use of llamas by the public on Agency lands.

WHO SHOULD ATTEND: This course is designed mainly for field level employees who use llamas or are considering using llamas, and personnel who use pack and saddle stock and might have encounters with llamas.

LENGTH: 16 hours (Noon Monday to Noon Wednesday)

COST: There is a tuition charge of \$150 for Forest Service personnel and \$200 for non-Forest Service personnel. Each sending unit is responsible for salary, per diem, and travel costs for their participants.

CONTENT: Specific topics include: 1. Llama basics. 2. History and present-day status of llamas. 3. Abilities of the pack llamas. 4. Considerations for llama use in existing or proposed stock programs. 5. Equipment. 6. Training needs (llama and human). 7. Problems in the back country.

COURSE OBJECTIVES: As a result of this course, the trainee will: 1. Be familiar with the physical and behavioral characteristics of the llama. 2. Ascertain the information necessary to decide how llamas might enhance an existing or proposed stock program. 3. Gain insight into the ramifications of the public's use of llamas in wildland areas.

INSTRUCTION METHODS: This course will be taught by an experienced llama outfitter and spokesman. An interactive approach will be utilized. Course time is approximately 50% lecture and discussion and 50% llama handling.

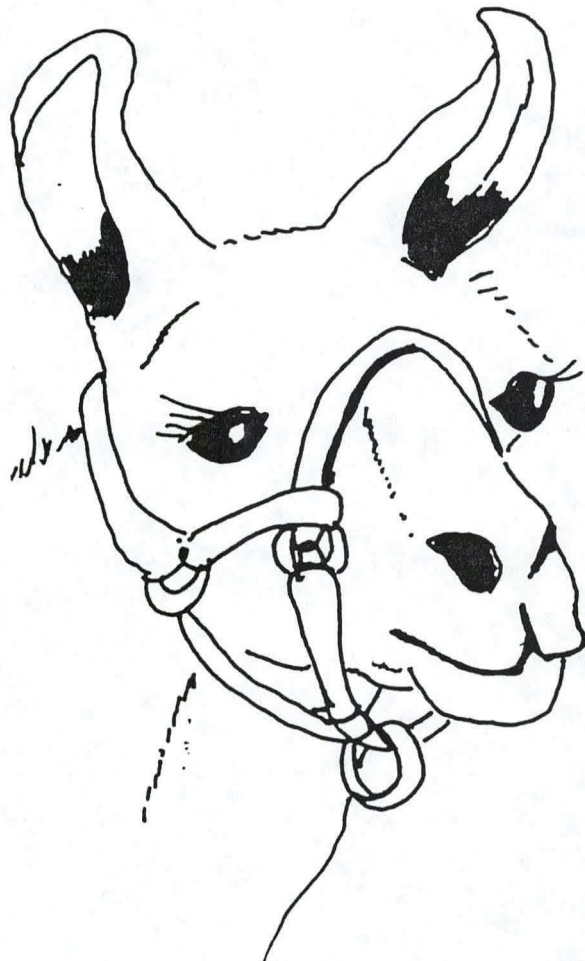
LOCATION AND ACCOMMODATIONS: This training opportunity is held at the historic Ninemile Remount Depot/ Ranger Station, Lolo National Forest, Huson, Montana, located 25 miles west of Missoula, Montana. Participants must make their own arrangements for lodging and meals. Restaurants are available near Ninemile or in Missoula. Information on lodging and transportation is available on request. **Possible "satellite" course. We can bring it to you.** Contact Bob Hoverson for information.

ENROLLMENT: Please submit nominations on a SF-182, or equivalent training nomination form, to Shirley Deschamps, Assistant Training Coordinator, Ninemile Wildlands Training Center, Box 616, Huson, Montana 59846 - (406)626-5201. **Please include the applicable region, unit number, and billing or management code on your nomination form to ensure proper payment. Nominations are due by April 15.** Cancellations will be accepted until two weeks before the course begins. Substitutions are accepted until the day of the course. Enrollment is limited to 20 students. Minimum enrollment is 10.

INFORMATION: For further information, please contact Bob Hoverson, Training Coordinator, or Shirley Deschamps, Assistant Training Coordinator, Ninemile Wildlands Training Center, Box 616, Huson, Montana 59846, phone (406)626-5201 or DG: B.Hoverson:R01F16D04A or S.Deschamps:R01F16D04A.

APPENDIX

G



Questionnaire #1, Current Agency Use

Forest & District	Contact Person	Address 1	Address 2
ARAPAHO NF - SULPHUR RD	JACK PLACCHI	PO BOX 10	GRANBY, CO 80446
ARAPAHO-ROOSEVELT - REDFEATHER R.D.	KAREN ROTH	210 E. OLIVE	FT. COLLINS, CO 80524
BEAVERHEAD N.F. - DILLON R.D.	JIM LINCOLN	2400 WEBSTER LN.	DILLON, MT
BIGHORN NF - BUFFALO RD	MIKE STROHBUSCH AND/OR JULIE BAKER	300 SPRUCE ST.	BUFFALO, WY 82834
BITTERROOT NF - DARBY R.D.	WILLIAM R. TERRILL	PO BOX 388	DARBY, MT 59820
BITTERROOT NF - STEVENSVILLERD.	DAVE SILVIEUS & BRUCE FAHRNI	88 MAIN ST.	STEVENSVILLE, MT 59870
BITTERROOT NF - WEST FORK RD	BOB OSET	WEST FORK R.D.	DARBY, MT 59825
BRIDGER TETON N.F. - BIG PINEY R.D.	LORI DENTON	PO BOX 218	BIG PINEY, WY 83113
BRIDGER-TETON N.F. - PINEDALE R.D.	DAVE HOHL	BOX 220	PINEDALE, WY 82941
CIBOLA NF-MOUNTAINAIR RD	DONALD L. HALL	PO BOX 3	MOUNTAINAIR, NM 87036
DESCHUTES NF - SISTERS RD	PAUL ENGSTROM	BOX 249	SISTERS, OR 97759
KOOTENAI N.F.-LIBBY R.D.	JON JERESEK	1263 HWY 37,	LIBBY, MT 59923
Mt. Baker-Snoqualmie N.F.	Gary Pawl, Trail Coord.	21905 64th Ave. West	Mountlake Terrace, WA 98043
NEZ PERCE NF - RED RIVER RD.	LAURIE SIMMONDS	BOX 23, RED RIVERROUTE	ELK CITY, ID 83525
PAYETTE N.F.- KRASSEL R.D.	CLEM POPE OR PATTI STIEGER	BOX 1026	MCCALL, ID 83638
SANTA FE N.F. - PECOS/LAS VEGAS R.D.	TOM DWYER	PO DRAWER 429	PECOS, NM 87552
SANTA FE N.F. - S.O.	CARL LINDERMAN	1220 ST. FRANCIS DR.	SANTA FE, NM 87505
SANTA FE NF - ESPANOLA RD	PAT THAMPSON	PO BOX R	ESPANOLA, NM 87532
TOiyABE NF - BRIDGEPORT RD	JOHN HAUGH	PO BOX 595	BRIDGEPORT, CA 93517
WASATCH - CACHE N.F.- MOUNTAIN VIEW R.D.	KIM FOILES	PO BOX 129	MOUNTAIN VIEW, WY 82939
WHITE MOUNTAIN NF, EVANS NOTCH R.D.	RICK MCVEY	RR2, BOX 2270	BETHEL, ME 04217

QUESTIONNAIRE #1-ANTICIPATED FS USE

<u>Forest & District</u>	<u>Address 1</u>	<u>Contact Person</u>	<u>Address 2</u>
BIGHORN N.F. - TENSLEEP R.D.	2009 BIGHORN AVE.	GLENARD T. HARE	WORLAND, WY 82402
BRIDGER -TETON NF-JACKSON R.D.	BOX 1639	LOIS ZIEMANN	JACKSON, WY 83001
CLEARWATER NF - LOCHSA RD	KOOSKIA RS, RT 1, BOX 398	MEL FOWLKES	KOOSKIA, ID 83539
FISHLAKE NF-RICHFIELD R.D.	115 EAST 900 NORTH	VAL NORMAN	RICHFIELD, UT 84701
RIO GRANDE NF - COREJOS PEAK RD	21461 SH 285	JIM HONG	LA JARA, CO 81140
Wasatch-Cache NF - Kamas RD	PO Box 68	Barb Walker	Kamas, UT 84036

QUESTIONNAIRE #1-PAST FS USE

<u>Forest & District</u>	<u>Contact Person</u>	<u>Address 1</u>	<u>Address 2</u>
BIGHORN NF - PAINTROCK R.D.	THAD HARPER, REC. FORESTER	PO BOX 831	GREYBULL, WY 82426
NEZ PERCE NF - ELK CITY DISTRICT	DEE OGDEN	PO BOX 416	ELK CITY, ID 83525
NEZ PERCE NF - MOOSECREEK RD	MIKE MYERS	PO BOX 464	GRANGEVILLE, ID 83530

QUESTIONNAIRE #2-NO FS USE

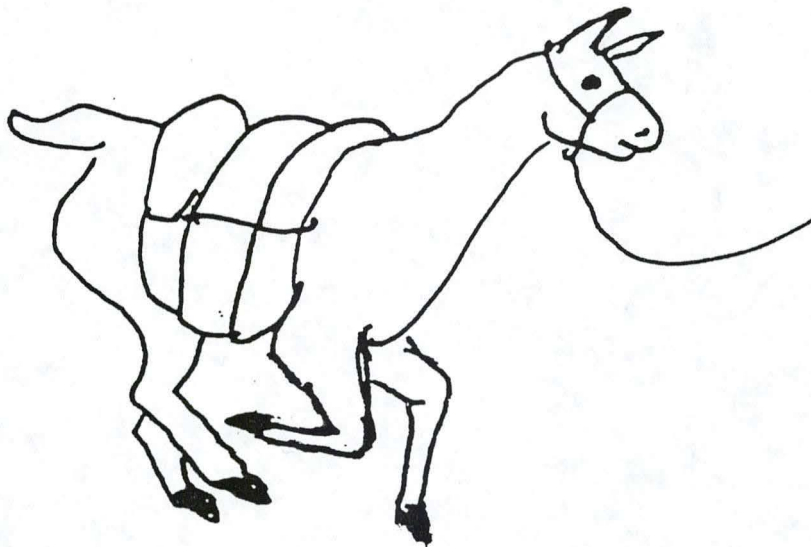
Forest & District	Contact Person	Address 1	Address 2
ARAPAHO - ROOSEVELT NF - ESTES-POUDRE RD	TRAILS FORESTER	148 REMINGTON ST.	FT. COLLINS, CO 80524
BEAVERHEAD NF.-MADISON & SHERIDAN RD	DALE RAGAIN	5 FOREST SERVICE RD.	ENNIS, MT 59729
BIGHORN N.F. - TONGUE R.D.	KARL KUKUCHKA	1969 S. SHERIDAN AVE.	SHERIDAN, WY 82801
BRIDGER TETON NF - GREYS RIVER RD	STEVE VAN LEERBERGHF	BOX 339	AFTON, WY 83110
CARIBOU NF - POCATELLO RD	MICHAEL COOK	SUITE 187, FED. BLDGE - 250 S. 4TH	POCATELLO, ID 83201
CARSON N.F. - S.O.	BILL MOEHN	BOX 558	TAOS, NM 87571
CHUGACH NF - SEWARD R.D.	IRENE B. LINDQUIST	BOX 63	MOOSE PASS, AK 99631
CIBOLA NF-SANDIA RD	JANE CROPP-REC. TRILS & WILL	11776 HWY 337	TIJERAS, NM 87059
COCONINO NF - BEAVER CREEK & LONG VALLEY RD	DEBBIE STEEN	HC 64, BOX 240 (BEAVER CK. RD)	RIMROCK, AZ 86335
ELDORADO NF - GEORGETOWN RD	ARTHUR ALLEN	7600 WENTWORTH SPRINGS RD	GEORGETOWN, CA 95634
ELDORADO NF, AMADOR R.D.	CHUCK LOWRIE, DIST. RESOURCE	26820 SILVER DR.	PIONEER, CA 95666
GALLATIN N.F. - HEBGEN LAKE R.D.	CLAUDE A. COFFIN	PO BOX 520	WEST YELLOWSTONE, MT 5
GALLATIN N.F. - LIVINGSTON R.D.	RALPH STEWART	RT. 62, BOX 3197	LIVINGSTON, MT 59047
GALLATIN NF. - BIG TIMBER RD	FRANK CIFACA	PO BOX 196	BIG TIMBER, MT 49011
GEORGE WASHINGTON N.F. S.O.	NORM HEINTZ, REC. STAFF	PO BOX 233	HARRISONBURG, VA 22801
GIFFORD PINCHOT N.F.-PACKWOOD R.D.	MIKE ROWAN, REC. PLANNER	13068 US HWY 12	PACKWOOD, WA 98361
GRAND MESA, UNCOMPAGHRE, & GUNNISON - PAONIA	L.K. SANDERS	PO BOX 1030	PAONIA, CO 81428
GRAND MESA, UNCOMPAGHRE, GUNNISON NF - CEBOLLA RD	SANDY THOMPSON	BOX 189	LAKE CITY, CO 81235
GRAND MESA, UNCOMPAHGRE & GUNNISON - OURAY RD	LEWIS M. FRENCH	2505 S. TOWNSEND AVE.	MONTROSE, CO 81401
GREEN MOUNTAIN NF - MIDDLEBURY RD	RUSS EASTWOOD	RD 4, BOX 1260	MIDDLEBURY, VT 05778
KLAMATH NF - SCOTT RIVER RD	CHUCK SMITH	11263 N. HWY 3	FT. JONES, CA 96032
KLAMATH NF - SO	RUBEN CONTRERAS	1312 FAIRLANE RD.	YREKA, CA 96097
LEWIS & CLARK N.F. - ROCKY MTN. R.D.	PATTI JOHNSTON	PO BOX 340	CHOTEAU, MT 59422
LOLO NF - NINEMILE RD	BOB HOVERSON	PO BOX 616	HUSON, MT 59846
MALHEUR NF - S.O.	TIM KIMBLE OR IVAN MULDER	139 NE DAYTON	JOHN DAY, OR 97845
MT. BAKER-SNOQUALMIE NF - DARRINGTON RD	PAT COOK	1405 EMMONS ST.	DARRINGTON, WA 98241
OKANOGAN NF - TONASKET RD	HOWARD CHRISTENSEN	PO BOX 466	TONASKET, WA 98855
OKANOGAN NF - WINTHROP R.D.	ARDIS BYNUM	BOX 579	WINTHROP, WA 98862
OLYMPIC NF-HOOD CANAL RD	J.H. JANDA	PO BOX 68	HOODSPORT, WA 98548
PIKE - SAN ISABEL NF. - SOUTH PLATTE RD	STEVE PRIEST	11177 W. 8TH ST.	LAKEWOOD, CO 80225
PIKE/SAN ISABEL - SALIDA R.D.	RICK VALLEJOS	325 W. RAINBOW BLVD.	SALIDA, CO 81201
RIO GRANDE N.F. - SAGUACHE R.D.	CAROLYN KELLER	PO BOX 67	SAGUACHE, CO 81149

QUESTIONNAIRE #2-NO FS USE

Forest & District	Contact Person	Address 1	Address 2
RIO GRANDE NF- CREEDE RD	JODY SMITH/JOYCE HOUSDEN	PO BOX 270	CREEDE, CO 81130
SAN ISABEL N.F. - SAN CARLOS R.D.	DAVE WALKER	326 DOZIER AVE.	CANON CITY, CO 81212
SAN JUAN NF - DOLORES RD	JOHN REIDINGER	PO BOX 210	DOLORES, CO 81323
SAWTOOTH NF - KETCHUM RD	BUTCH HARPER	BOX 2356	KETCHUM, ID 83340
SHASTA TRINITY NF - SOP	DUANE LYON	2400 WASHINGTON AVE	REDDING, CA 96002
SIERRA NF - KINGS RIVER R.D.	SUE HUGHEY	34849 MAXON RD.	SANGER, CA 93657
TARGHEE NF - ISLAND PARK R.D.	JACK NADDOX	PO BOX 220	ISLAND PARK, ID 83429
TARGHEE NF - TETON BASIN RD	JACK BOGLE	PO BOX 777	DRIGGS, ID 83422
TOIYABE N.F. - CARSON R.D.	JOHN NEELING	1536 S. CARSON	CARSON CITY, NV 89701
UNCOMPAHGRE N.F. - NORWOOD R.D.	JIM HACKETT	PO BOX 388	NORWOOD, CO 81423
WALLOWA-WHITMAN N.F. - LA GRANDE R.D.	DEB BARRETT	3502 HWY 30	LA GRANDE, OR 97850
WALLOWA-WHITMAN NF-PINE RD	TOM SMIT	GENERAL DELIVERY	HALFWAY, OR 97834
WALLOWA-WHITMAN NF. - EAGLE CAP RD	PAT O'CONNER	88401 HWY 82	ENTERPRISE, OR 97828
WALLOWA-WHITMAN NF. - HELLS CANYON N.R.A.	ED WEBER, JERRY WINEGAR	88401 HWY 82	ENTERPRISE, OR 97828
WENATCHEE N.F. - NACHES R.D.	DARCY JOHANNSEN/RIK SMITH	HWY 12	NACHES, WA 98937
WHITE RIVER NF - ASPEN R.D.	PAULA SCHWALBE	806 W. HALLAM	ASPEN, CO 81612
WHITE RIVER NF - DILLON RD	TOM HEALY	PO BOX 620	SILVERTHORNE, CO 80498
WHITE RIVER NF - EAGLE R D	BILL JOHNSON	BOX 720	EAGLE, CO 81631
WILLAMETTE N.F. - DETROIT R.D.	RAY CRIST	HC 73, BOX 320	MILL CITY, OR 97360
WILLAMETTE NF - LOWELL RD	D. GRAY	60 S. PIONEER	LOWELL, OR 97452
WILLAMETTE NF S.O.	STEVE SORSETH	PO BOX 10607	EUGENE, OR 97440

APPENDIX

H



Results Summary (3/93)

QUESTIONNAIRE #1

December, 1992

Dear Forest Service Recreation Manager: *The following questionnaire is part of the research for a project and professional paper being prepared by Bob Russell, Salmon National Forest, to assist in fulfilling the requirements of the Forest Service's Recreation Management Shortcourse at Clemson University. Participation by Forest Service employees who filled out an earlier questionnaire from the International Llama Association regarding the use and regulation of llama use on the National Forests of the United States is targeted. Your individual answers will not be published or otherwise distributed, except as part of a summary, to anyone other than the originator of the questionnaire. However, depending on your answers, we may contact you later to provide you additional information or request your assistance. **No more questionnaires will be sent, and we appreciate your assistance !!***

Your response, or the response of one of your fellow workers on your unit, indicated that either your unit is currently using llamas as pack stock to accomplish your mission, that your unit has used them in the past, or that your unit is seriously considering their use in the near future. The following questions are designed to determine the overall level of satisfaction on the unit with the llamas as pack animals, to determine what your unit's training needs might be, and how those needs can best be met.

Please circle Y (es) or N (o), circle one or more of the letters of multiple choice answers, or fill in the blanks. Please feel free to attach additional pages if you need more space.

1. If your unit has used llamas in the past, what do you think is the general consensus of the employees involved related to the llamas' ability to be of continued assistance to you as pack stock:

- a. Very impressed and very likely to be helpful in the future. 9
- b. Somewhat impressed and likely to be helpful in some situations. 8
- c. Not too impressed and not likely to be used much in the future. 3
- d. NA (we haven't used them yet). 3
- e. I can only speak for myself, but I think: 0

(1) I have problems using "non-native animals in the Wilderness"

(1) We had mixed results-llamas were poorly trained and poorly handled.

2. If you have not yet used llamas as pack stock yet, what is (are) the primary factor (s) preventing their use on your unit at the present:

- a. lack of information as to their capabilities. 0
- b. lack of information as to where to obtain them (lease or purchase). 0
- c. lack of budget dollars required. 5
- d. lack of support from others higher up in the organization to try them. 2
- e. lack of knowledge on how to use, house, and care for them. 1
- f. concern that the public, or some segments of the public, would not support your use of llamas. Who? (2) horse users
- g. nothing, except we have not gotten around to trying it. 1
- h. other (3) Safety considerations(horses on trail), no field people are interested, we lack a place to keep them.

3. Who are the people (by position or area of responsibility) who do (or would) use the llamas?

(2)-Forestry Technicians. (14) Wilderness/Backcountry Rangers,
(13) Trail Crew(3) -Backcountry Cleanup Patrol. (2) Wilderness
managers. (1) Adopt-a trail projects, air quality monitoring crew,
wildlife and fish studies, research project support.

4. What do you think are the primary tasks that the llamas are (or would be) most useful in helping you accomplish?

(8) packing loads of camping gear, tools, trash, etc (3) minimum impact
education tool/visitor contact (2) carrying in trail maint. materials (1)
packing shavings for composting toilet into backcountry. travel "light on the
land". cleanup backcountry, assist with search and rescue.

5. Are the people who do (or might) use the llamas already sufficiently trained and/or otherwise knowledgeable in the use and care of the llamas ? Y 13 N 11

(Somewhat 1)

6. To the best of your knowledge, were the right people on the unit aware of the course called "Understanding Llamas" that has been offered for the last two years, in the spring, at Region 1's Ninemile Wildlands Training Center near Huson, MT? Y 13 N 11 (dont know 1)

7. If yes to #6 above, why do you think no one attended from your unit:

- a. We signed someone up, but the course was cancelled. 0
- b. It was offered at a bad time of the year. 0
- c. It would have cost too much money. 7
- d. There was just too much going on and no one could get away. 4
- e. After looking at the course outline, we didn't think it was what we needed. 0
- f. We couldn't justify the amount of time it would have taken to attend. 6
- g. It was too late to sign up when we learned of it. 0
- h. We tried, but did not have the support of the person on the unit who makes the training decisions. 2
- i. Other:

(5) we got the training we needed locally (2) llama handler has
his/her own llamas (1) have knowledgeable employees that do
training. (1) no plans to use llamas.

8. The course is being offered again in 1993. It is scheduled for 2 1/2 days, May 24 through 26, 1993 at the Ninemile Training Center. The tuition cost is \$100 in addition to the costs of travel, commercial lodging, and meals for attendees. It is planned to include a one day "hands on" hike in woods with pack llamas, and classroom discussion on their capabilities, equipment, care, housing, backcountry first aid for the llamas, and low impact use in the field. Do you think your unit will be interested in sending one or more persons to this session this year?

Y 1

N 13

Not sure yet 10

9. What change(s) in the course would be desirable to significantly increase the chance that someone from your unit would attend?

- a. eliminate the tuition 3
- b. reduce it from 2 1/2 days to (1) 1 1/2 to 2 days. (1) 1 day
- c. change the emphasis by 0
- d. eliminate the classroom discussion and do it all in the field. 0
- e. eliminate the field portion and do it all in the classroom 0
- f. hold it closer to our location to reduce travel time and costs. 1 4
- g. hold it in conjunction with some other planned training. 5
- h. hold it at some other time of the year. When? 0
- i. hold it where the Forest Service could provide lodging for 10-30 attendees, to cut costs. 4
- j. other : **(3) get it from leasor , (1) accomplish some work in the field in conjunction with training.**

10. If you circled item 9. f. above, how far do you think the interested people on your unit would be willing to travel for this training? (7) 150-250 miles, (1) closer the better (1) within Region

Can you suggest a location that would serve you and a number of other units?

(2) NW Wyoming near Jackson. (2) Arapaho/Roosevelt NF. Central Colorado (2) Northern New Mexico (1) Northern Idaho near Grangeville (1) Salt Lake City area (1) Bishop, CA (1) Cispus Center nr Randall WA (1) Mt Shasta, CA (1) Bethel, Maine (1) Rio Grande NF. southern Colo (1) Cody Wyoming at the Paradise Ranch. Buffalo District.

11. If you circled item 9. g. above, do you know of some other training session planned in 1993 that a one to two and a half day session on using llamas as pack stock could be held in conjunction with? Y 1 N 3

What is it, where is it scheduled, and when? Deschutes and Williamette NF

12. If you circled item 9. i. above, do you know of a government facility that might be used to conduct the session where lodging for 10-30 participants could be provided?

Y 1 N 3 Where? Paradise Ranch, Buffalo Ranger District

13. It has been suggested that there is a need for a Forest Service sponsored 1/2 to 1 day "awareness " level course on llama use for program managers, crew supervisors, District Rangers, Forest staff, etc., designed primarily to discuss the capabilities and advantages/ disadvantages of using llamas as pack stock. Do you think that such a course would be useful to you in obtaining the support you need to continue/begin your use of llamas on the unit?

Y 9 N 11

14. Would you, or someone on your unit, be willing to assist the Ninemile Training Center in setting up either a 2-3 day session for field people, or a 1/2 to 1 day "awareness" session for other unit staff in your general area?

a. Yes-we could assist with either or both. (3)-Sulphur, Stevensville.

Libby RDs

b. Yes-we would be most interested in the longer, "hands-on" session.

c. Yes-we would be most interested in the "awareness" session. 2

d. No-I doubt that we can help at this time, but we probably would participate in the session. 6

e. Don't really think either are necessary. 6

15. Please fill out the following information about yourself, as the preparer of this information:

Name: _____, Title: _____

Unit: _____

DG address: _____

Mailing address: _____

Phone # _____

16. If you have indicated some potential training needs above, are you the very best person on the unit to contact in the future about training opportunities? Y N

If not, who is:

Name: _____ Title: _____

Phone(if different from yours) _____

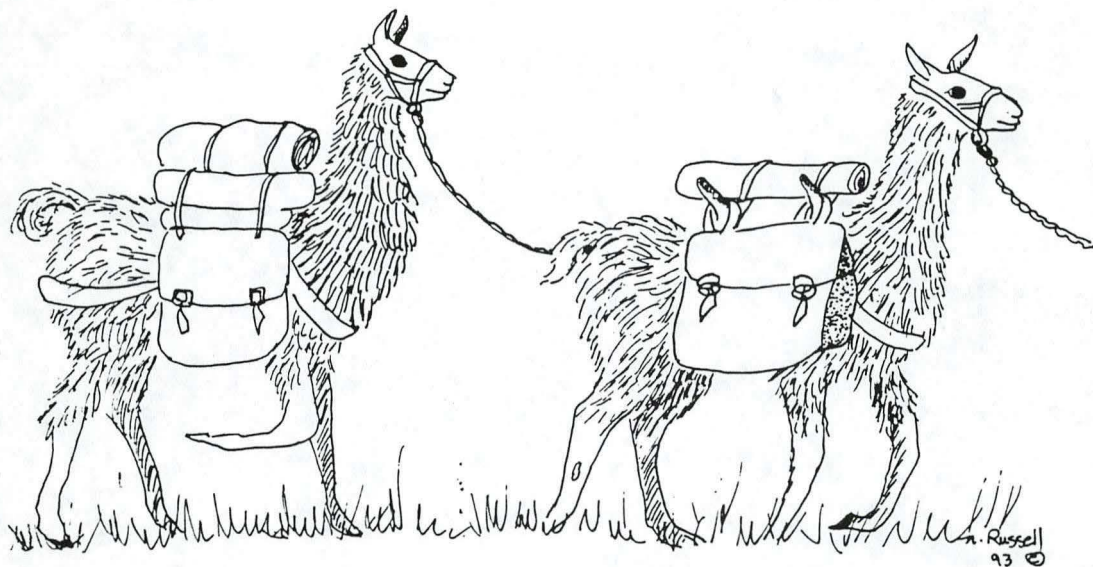
DG address: (if different) _____

Mailing address (if different) _____

THANK YOU ONCE AGAIN FOR YOUR TIME!! PLEASE MAIL IN THE ENCLOSED ENVELOPE TO BOB RUSSELL, SALMON RANGER DISTRICT, SALMON NATIONAL FOREST, P.O. BOX 729, SALMON, ID 83467. QUESTIONS/ COMMENTS? CONTACT ME ON DG AT R.RUSSELL:R04F13B.

APPENDIX

I



RESULTS SUMMARY (3/93)

QUESTIONNAIRE #2

DECEMBER, 1992

Dear Forest Service Recreation Manager: *The following questionnaire is part of the research for a project and professional paper being prepared by Bob Russell, Salmon National Forest, to assist in fulfilling the requirements of the Forest Service's Recreation Management Shortcourse at Clemson University. Participation by Forest Service employees who filled out an earlier questionnaire from the International Llama Association regarding the use and regulation of llama use on the National Forests of the United States is targeted. Your individual answers will not be published or otherwise distributed, except as part of a summary, to anyone other than the originator of the questionnaire. No more questionnaires will be sent, and we appreciate your assistance !!*

Your response to the previous questionnaire indicated that your unit has not used llamas in the past. even though the person who filled it out was aware that there is use by both the general public and by commercial outfitters on the unit.

The purpose of this followup questionnaire is to determine the most likely reasons why such use by others has not yet lead to use by the Forest Service on your unit. If there is someone on the unit that is in a better position to answer that question than you, would you please attempt to consult with them, or ask them to complete and return the questionnaire?

Please circle Y (yes) or N (no), circle one or more of the letters of multiple choice answers, or fill in the blanks. Please feel free to attach additional pages if you need more space.

1. Are there jobs on the unit that you believe might be done better by using llamas to pack equipment and supplies than the way it is currently being accomplished?

(13) N 12 I Don't know 10

Y

2. If yes above, what are those jobs?

- (7) support Wilderness Rangers (5) support trail crew
- (3) packing equipment and supplies into backcountry/wilderness
- (2) all jobs currently being done by horses
- (1) transporting materials for trail structures/shelters/site improvements
- (1) packing on sensitive trails/off trails
- (1) staff "show-me" trips

3. What, in your opinion, are the primary factors that have resulted in the fact that your unit has not yet used llamas as pack animals?

- a. Its on our list, but we just haven't gotten around to it. There are probably no barriers. 3
- b. We can drive pretty much everywhere on the unit we have projects to do. We really do not need pack animals of any kind. 4
- c. We use horse/mules for all our packing chores because that is what we're equipped for and/or what we know how to do the best. 23

- d. We can backpack most of what we need into the backcountry- the logistics of using any kind of pack stock is just not worth the effort. 4
- e. We just never thought of it, so I don't know if there are any barriers or not. 0
- f. We lack the information necessary to know if they would be useful to us. 6
- g. We've thought about it, but we lack information on where to obtain them(lease or purchase). 1
- h. We do not have the information and/or facilities needed to house/care for them when not in use. 10
- i. We lack the necessary equipment to transport them to the field. 3
- j. We lack the necessary money in our budget to support the purchase or lease of llamas. 15
- k. We lack support from persons higher in the organization to try them. 2
- l. I/WE do not think that llamas belong on our unit/in our Wilderness, so we just aren't interested in trying them. 3
- m. I/ WE are concerned that the public, or some segment of the public/ would not support our use of llamas. 4
Who? (2) Backcountry Horsemen, (1) wilderness advocates (1) horse folks
- n. I/WE have known people who have tried them, apparently with unsatisfactory results, so I/we will have to be convinced that they can help us get the job done. 0
- o. I/We have heard bad things about llamas, that they : (1) scare horses, (1) spit, (1) can't carry bulky stuff
- p. I/We have personally seen them in action, resulting in the conclusion that they would not be helpful to us because 1

- q. We've tried, it fell through for reasons beyond our control, but we'll probably try again. There are really no specific barriers as far as I know. 0
- r. Other: (2) Horses are more cost effective
(1) too many conflicts with other users
(2) lack enough consistency in our seasonal workforce to train people
(1) too much going on to take the time to switch to llamas

4. It has been suggested that there is a need for a Forest Service sponsored 1/2 to 1 day "awareness " level course on llama use for program managers, crew supervisors, District Rangers, Forest staff, etc., designed primarily to discuss the capabilities and advantages/ disadvantages of using llamas as pack stock. Do you think that such a course would be helpful in obtaining the information your unit needs to decide whether llamas would be useful to you?

Y 12 N 21 Maybe 1

5. Are you interested in having more information on the characteristics and use of llamas sent to you?

Y 19 N 15

6. If someone with well-trained pack llamas came into your office and offered to assist you with a project you need done, would you be likely to sign them up as volunteers to help do it?

Y 31 N 1 Maybe 2

Do you think you would take the opportunity to work with them in the field on the project so you could gain a better understanding of the capabilities/limitations of llamas as pack stock?

Y 25 N 2 Maybe 6

7. If you have answered yes to one of the questions in items 4, 5 or 6 above, may we have the following information and contact you (or the individual listed below) again with written information and/or information on training opportunities?(Feel free **not** to fill in the blanks below if you do not want to be contacted again.)

Name: _____, Title: _____

Unit: _____

DG address: _____

Mailing address: _____

Phone # _____

THANK YOU ONCE AGAIN FOR YOUR TIME!! PLEASE MAIL IN THE ENCLOSED ENVELOPE TO BOB RUSSELL, SALMON RANGER DISTRICT, SALMON NATIONAL FOREST, P.O. BOX 729, SALMON, ID 83467. QUESTIONS/ COMMENTS? CONTACT ME ON DG AT R.RUSSELL:R04F13B.

Following are some of the comments recorded on the questionnaire in various locations:

•llamas would actually cause some problems that horses/mules do not at the present (Not specific).

•our llamas drew foot travelers to our Wilderness Rangers, but kept away the horse users.

•We do not want to use them on trails closed to saddlestock.

•Our public use stopped when local outfitter quit (eastern District).

•We pack large quantities of bulky items-llamas couldn't hack it.

•llamas have the reputation for starting "rodeos".

•llamas are like mountain bikes-the public uses them, but we dont.

•on a previous unit, wilderness ranger used llamas with mixed results-neither the animal nor the handler were sufficiently trained.

•in order to have any type of successful stock program, you have to have lots of user-advocates on the ground. We are not there with llamas yet.

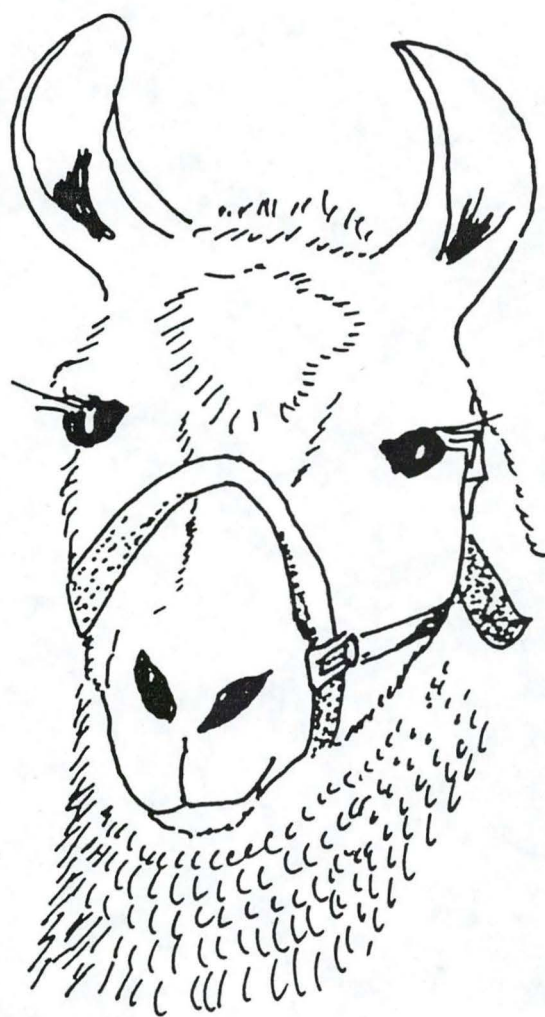
•there are lots of llamas in our valley, but most of them are pets, not pack animals.

•the Forest Service has a large investment in tack and horses. A switch to llamas will need to be philosophically important to someone who makes the decisions for that to happen.

•I am a strong believer in the use of llamas, too bad there aren't more of us.

APPENDIX

J



HORSEMAN'S LETTER AND HYPOTHETICAL RESPONSE

The following letter is a copy of one actually received by the a Forest Service unit in Montana in 1991 from a member of the Backcountry Horseman's group expressing his views on the use of "kids and llamas" to maintain trails in the Wilderness. His name and address and other identifying information have been deleted. Following that letter is the response that, with any luck, he might one day receive from the Forest Service explaining why llama use is being encouraged by the agency in many situations. This hypothetical response letter also summarizes the arguments developed in this paper for the increased use of llamas by the Forest Service.

SEP 26 1997

Dear Sir:

Our wilderness areas are something we can all be proud of and can all enjoy, and according to the U.S. Forest Service, the agency responsible for supervising most wildernesses, the wilderness is supposed to remain a wild and untrammelled place - a natural place. And before I proceed any further, let me state that I unequivocally support the Forest Service's policy of keeping the wilderness as near natural as possible.

I am a Bitterroot native who started working in the woods cutting Christmas trees when I was 14 years old and I worked in the woods for over fifty years. This year I am 70 and I will again be harvesting young trees to sell at Christmas time. My wife and I are charter members of the Bitterroot Back Country Horsemen Club and have donated many hours labor to the Forest Service in clearing trails, packing in trail crews and their tools and supplies.

All our trails in all our forest were built with men, horses and mules. Many of the trails were old game trail and many had been used by the Indians before the white man arrived. In other words, our trails have a long tradition of providing a road of transportation. This tradition is well over a 100 years old and continues to serve hikers, riders and other recreationist as we approach the 21st century.

I am writing, not to question why we have trails, but why the Forest Service, after all these years, has decided, in some Ranger Districts, to bring in exotic animals to maintain those trails. I am speaking of course about the llamas used here in the Bitterroot and in Kalispell. I want go on record as stating that I am adamantly opposed to the use of the llama by the U.S. Forest Service.

There is absolutely no way you can justify the llama as a work animal when compared to a horse or mule. The initial cost of a llama is almost twice the cost of a horse or mule. A horse or mule can consistantly pack loads of 200 pounds while the lowly llama can only pack 60-80 pounds. Horses and mules walk about 3-4 miles an hour; a llama covers only two in the same period. You cannot pull a string of llamas with a saddle horse or mule; you have to walk.

I realize that llamas have feet about like a person and do little damage to trails, but if horses and mules are properly shod, i.e. with flat plate shoes, and properly picketed at night, they will do no more damage than a llama, or a goat or a person. On Back Country Horsemen trips we have repeatedly camped out with groups of horses and mules and left the meadow as good or better than when we found it.

In the final analysis there is no way the Forest Service can justify the use of the llama when there are good horses and mules available all the time. The problem seems to be that the Forest Service only hires young, city raised kids who have never even seen a wilderness trail, much less ever handled a horse or a mule.

The Forest Service hires these kids, many who can barely lift a double bitted axe, and expect them to clear trails. They expect the kids to walk and lead a llama and it ain't working out. They ain't getting the job done. Clearing trails is hard, heavy work. Work that requires a lot of strength, a lot of tools and a lot of supplies.

While our wilderness trails are fast deteriorating the Forest Service is tinkering around with kids and llamas. I think it's about time to return the job to men, horses and mules. All wilderness users should let the Forest Service know where we stand on this issue.

Hypothetical Response to Horseman's Letter

Dear Sir:

Thank you for your interest in Forest Service management of Wilderness. We appreciate you sharing your views on the use of llamas as pack stock for clearing Wilderness trails. In response, I would like to tell you some of the reasons why the use of llamas as pack stock is increasing on the National Forests and why the Forest Service is encouraging that use.

First, I want to assure you that the Forest Service will continue to use horses and mules, and people who know how to handle them, for many jobs that must be done in Wilderness and other undeveloped areas. In many cases, the distances that must be traversed by our crews is simply too far to be covered adequately on foot in a timely manner. In other cases, heavy loads will continue to require the larger pack stock to move it effectively. While llamas may pack up to 120 pounds(twice that of a heavily laden backpacker), well trained horses and mules each may pack up to two and a half times that, as you know.

However, when horses or mules are not needed, we are encouraging our trail crews to use llamas, primarily because they have considerably less impact on trails and fragile soils than does a horse/mule. That difference is greater when the trail is wet or crosses soils with little cohesive properties. The primary reasons for that difference in impact from walking are the fact that the llama weighs about 1/3 to 1/4 that of the larger animals, and their feet are padded(much like a dog) rather than hooved, and do not need to be shod. Also, because of their efficient digestive systems, they eat (and also eliminate) much less than a horse, which decreases the impact on vegetation and campsites. Finally, as a rule, llamas instinctively react to darkness by lying down and not moving around much, in contrast to the active nature of most horses at night. That behavior also considerably reduces the potential impacts to vegetation and campsites.

Another reason that we are increasing using llamas when horses/mules are not needed is that most trail maintenance activities (with the exception of cutting high, overhanging vegetation) require the crew person to be on the ground while

working. Over the years we have found that trails are not adequately maintained by horseback crews in transit from one place to another because it is simply not likely that they will dismount, secure the horse, and do the work each time a waterbar needs cleaning, a rock removed, or brush grubbed from the trail. So, to be effective, in the past mounted crews had to ride to a campsite or staging area and then cover the same ground on foot to do the needed work. Likewise, crews in transit carrying heavy backpacks were impaired by their packs. The use of llamas allows the crew member to cover the trail on foot and to be free of heavy loads.

Still another reason we are increasingly using llamas is the factor of safety. As you pointed out in your letter, our workforce in the field is much changed from earlier years-many of them have little or no experience with horses and mules and the proper ways of handling them. That lack of experience is not something we can overcome with a few days training, and it is increasingly difficult to find crew members who already have it. Llamas, because of their smaller size and some aspects of their personality, are considerably less of a safety hazard around persons with little livestock experience.

The Forest Service does not consider llamas to be "exotic" animals- they are instead simply an alternative type of domestic pack animal, such as a burro, a domestic goat, or even the family dog with a pack (Llamas have, in fact, been domesticated longer than the horse, though in South America rather than Europe). The term "exotic", when applied to animals or plants within Wilderness or a given ecosystem, refers to a species that may invade the area and actually live and reproduce there. For a variety of reasons, that is very unlikely to happen with llamas. Of course, feral (wild) horses and mules would also be considered "exotic" in the case where new populations were established by their careless abandonment by people in these areas.

In short, there is nothing in the Wilderness Act or elsewhere that favors the use of horses or mules over llamas, though either or both may be excluded from certain areas if the potential impacts are too great. So, where pack animals are allowed, and where the job cannot be done by people on foot without pack stock, it is our policy to use the "minimum tool", which is defined as the one with the least impact that will get the job done. Often , in the case of trail maintenance work, that may very well be a llama.

Finally, it is important that you understand that the Forest Service does not in any way feel that llamas are "better" than horses or mules-either as work animals or as recreational stock. They simply are different, with some advantages under certain conditions. It is our objective to use the best pack animal available, considering the circumstances. Often, the horse is by far the best choice when the distances are great and the loads heavy. At other times, llamas may be a better choice.

I hope that the above gives you some insight as to why the Forest Service is increasingly using llamas for certain packing jobs on the National Forests of the west. I would be happy to discuss it further with you at any time.

Sincerely,

Joe Blow
District Ranger